

Interpreting Averroes

Critical Essays

EDITED BY
Peter Adamson
Matteo Di Giovanni



INTERPRETING AVERROES

This volume brings together world-leading scholars on the thought of Averroes, most famous as the greatest medieval commentator on Aristotle but also a major scholar of Islam. The collection situates him in his historical context by emphasizing the way that he responded to the political situation of twelfth-century Islamic Spain and the provocations of Islamic theology. It also sheds light on the interconnections between aspects of his work that are usually studied separately, such as his treatises on logic and his legal writings. Advanced students and scholars will find authoritative and insightful treatments of Averroes' philosophy, tackled from multiple perspectives and written in a clear and accessible way that will appeal to those encountering his work for the first time as well as to anyone looking for new critical approaches to Averroes and his thinking.

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*Introduction**

Peter Adamson and Matteo Di Giovanni

Let's begin with his name. In his own life and time it was Abū l-Walīd Muḥammad ibn Aḥmad ibn Muḥammad Ibn Rushd (AD 1126–98). That name conjures him as a Muslim jurist whose father and grandfather were likewise judges (“ibn” means “son of”). But in the medieval Christian world he was known under a latinized version of “Ibn Rushd,” namely “Averroes.” Or sometimes he was not named at all, because he did not need to be. Like Aristotle, whom the scholastics honored as “the Philosopher,” Averroes was often simply referred to in medieval Latin literature as “the Commentator.” The title was a well-earned one, which recognized Averroes’ status as the indispensable guide to Aristotle’s thought. Along with the AD second-century commentator Alexander of Aphrodisias, Averroes stands as the greatest pre-modern exegete of Aristotle. He is seen almost exclusively in this light by contemporary scholars, who have devoted considerable attention to his acute observations on Aristotelian texts and above all to his impact on Latin Christian thought.

In this volume we have made the pragmatic decision to refer to our protagonist using the name by which he is best known in English. But our goal has been, as it were, to recover the Ibn Rushd who stands behind Averroes.¹ Perhaps more than any other medieval thinker, Averroes is an author who is read retrospectively. Admittedly, this approach is not unjustified. Given the extensive influence of his commentaries in both

* The editors would like to thank Michael Lessman for his assiduous and careful work in preparing the volume for press. Richard C. Taylor and Anke von Kügelgen participated in a workshop on Averroes at the outset of our planning for this volume, which has benefited greatly from their input and advice.

¹ As recently advocated in Di Giovanni 2017: 19, “There is no other way towards a full appreciation of this thought in metaphysics as much as theology, in psychology as much as cosmology, than by connecting it to its vital roots rather than posthumous legacy. These roots are deeply embedded in Andalusian Islam, considered in all of its historical, social, and cultural dimensions.”

the Hebrew tradition (which especially used his paraphrases or “middle” commentaries²) and the Latin tradition from the thirteenth century through to the Renaissance, it makes good sense to explore Averroes through the lens of his reception. But our aim is a different one. We want to offer the reader a well-rounded portrait of Averroes’ thought within its historical and intellectual context. Hence we took the decision not to include chapters on his reception, preferring such topics as his reaction to *kalām* or Islamic law. The chapters devoted to his commentaries, meanwhile, extensively discuss Averroes’ response to the Aristotelian tradition as it led up to him, without getting into the ways that Christian or Jewish thinkers then responded to Averroes in their own commentaries.

A justification for this approach is set out in Chapter 1, by Matteo Di Giovanni, who argues that we should understand Averroes as a “philosopher of Islam.” His goal was (of course) not to facilitate the blossoming of Aristotelian scholasticism in Latin Christendom but to show how Aristotelian philosophy could address issues that were pressing in his own place and time, namely twelfth-century Andalus. Di Giovanni makes this case by examining two doctrines that were in fact strongly associated with Averroes in the Latin tradition, namely his endorsement of the eternity of the world and the uniqueness of the intellect. He argues that Averroes was motivated by the need to respond to al-Ghazālī, who was at that time exerting tremendous influence in Andalus, where he inspired the ruling ideology of the Almohads (i.e., those who “make one” God, i.e., profess God’s oneness). The notorious theory of the intellect, according to which individual humans unite to a universal mind that knows all things, was Averroes’ rationalist alternative to the mystical epistemology embraced by al-Ghazālī (and, one might add, by Averroes’ Andalusian contemporaries Ibn Ṭufayl and Ibn ‘Arabī). Similarly, the doctrine of the world’s eternity is an expression of Averroes’ wholehearted embrace of hylomorphism as enabling a scientific study of nature, unlike the occasionalism set forth by al-Ghazālī and other proponents of Islamic theology, or *kalām*.

His critical engagement with *kalām* was not always so implicit. In a work called *Exposition of the Methods of Proof Concerning Religious Doctrines* (*al-Kaṣf ‘an Manāḥij al-adilla fī ‘aqā'id al-milla*), which is presented in Chapter 2 by Mokdad Arfa Mensia, Averroes attacks the theologians head

² This brings us to another point of nomenclature: as has been pointed out by Gutas 1993, the traditional terms “long,” “middle,” and “short” commentaries are rather inaccurate. We instead use the terms epitome, paraphrase, and long commentary, with the corresponding abbreviations *Ep.*, *Paraph.*, and *LC*.

on. Embracing a literalist (*ẓāhirī*) approach to scripture, whose deep semantics is laid out by philosophy, he displays his knowledge, and disapproval, of theological arguments on a range of issues including the proof of God's existence and the possibility of grasping God's nature. He is especially concerned to respond to members of the Ash'arite school, including al-Ghazālī and al-Juwaynī, whom he routinely accuses of providing merely dialectical arguments, that is, arguments that depend on plausible premises that may or may not in fact be true. The same accusation is repeatedly leveled at al-Ghazālī in Averroes' scathing response to the former's *Incoherence of the Philosophers* (*Tahāfut al-falāsifa*) in the *Incoherence of the Incoherence* (*Tahāfut al-Tahāfut*). In fact, though, Averroes thinks the theologians are worse than dialecticians. Frequently the arguments they give are, as Averroes puts it in the *Exposition*, convincing "neither to the many nor to scholars."³ Strictly speaking, their supposed proofs do not even rise to the standard of properly executed Aristotelian dialectic.

With the theologians and mystics failing to pass muster, Aristotelian philosophy provides the sole reliable intellectual foundation. For Averroes this does not mean that philosophy is a kind of autonomous alternative to religious belief, along the lines of a theory of "double truth" such as has sometimes been ascribed to the Latin medieval scholastics labeled by modern scholars as "Latin Averroists."⁴ This was certainly not Averroes' view, as we can see from another work that has a good deal to say about *kalām*, the *Decisive Treatise* (*Faṣl al-maḡāl*). As Richard C. Taylor has shown, Averroes here invokes the Aristotelian rule that "truth does not contradict truth."⁵ But philosophy is not just in agreement with religion, it is the indispensable guide to true religious belief. This attitude has implications for Islamic jurisprudence, a topic explored here by Ziad Bou Akl and Feriel Bouhafa. In Chapter 3, Bou Akl focuses on legal works by Averroes, his *Jurist's Primer* and *Abridgement* of a work by the aforementioned al-Ghazālī. He shows that Averroes' legal epistemology is deeply indebted to the Aristotelian tradition and, in particular, to al-Fārābī's understanding of analogical reasoning in law, which was in turn based on the idea of an *exemplum* (*mithāl*), taken from Aristotle's logical works and especially the *Rhetoric*. This insight fits well with the argument by

³ *Exposition* 138.

⁴ For a critical discussion of this historiographical category, see Imbach 1991. A case for its usefulness is made by Marenbon 2007. On the double truth doctrine, see Dales 1984.

⁵ See Taylor 2000b.

Bouhafa in Chapter 4, which also uses the *Abridgement* but looks especially at Averroes' commentaries on the *Rhetoric*. She speaks of a full-blown "philosophy of law" in Averroes that assimilates the methods and epistemic status of juridical reasoning to those of rhetoric, so that legal proofs are akin to cases of rhetorical persuasion. Since legal conviction is thus always merely probable, Averroes is able to develop a notion of law as evolving and needing constant correction, as befits a system of norms that applies to changing human circumstance.

As one would expect from the *Decisive Treatise*, then, Averroes consistently associates traditional religious reasoning with the nondemonstrative methods of dialectic and rhetoric. Readers of the *Treatise* may wonder how exactly scientific or demonstrative reasoning differs from these less certain modes of reasoning. For this question we must turn to the material surveyed by Deborah L. Black in Chapter 6. In her chapter we learn that Averroes was a foundationalist who thought that knowledge in this strict sense must be grounded in certain first principles. The principles are in turn derived (only) from sense-experience; Averroes adopts a highly empiricist version of Aristotelian epistemology, in contrast to an author like Avicenna.⁶ In keeping with this, and against some earlier Aristotelians, Averroes would admit that we can have certainty about contingent truths and on the basis of individual encounters rather than only through induction from many experiences, a method of knowing emphasized by Avicenna under the name *tajriba*. In another way, Averroes is less liberal than Avicenna since he places a lower value on beliefs acquired through testimony. Here one may yet again see a connection to distinctively Islamic concerns, given the importance of testimony in the context of jurisprudence, for instance concerning the reports of the deeds and statements of the Prophet gathered together as *ḥadīth*.

With this chapter, the volume begins to move through the various departments of Aristotelian philosophy and in the traditional order: logic, natural philosophy, metaphysics, practical philosophy. Regarding the Aristotelian *Organon*, Black's discussion is complemented by that of Paul Thom, in Chapter 5. He focuses on the issues we would nowadays recognize as "logical," at the level of individual terms, the propositions made up of these terms, and the syllogisms that are then made up of propositions. Continuing a running theme of the volume, we here see Averroes responding critically to his predecessors in the Islamic world.

⁶ Black's chapter here may be usefully read alongside her contribution in P. Adamson (ed.), *Interpreting Avicenna: Critical Essays*. See Black 2013.

As Thom puts it, his “general approach in logical matters was to defend Aristotle against the innovations of Avicenna.” We see this for example with his treatment of necessity, as Averroes rejects Avicenna’s notion of conditional necessity and defends against him the traditional Aristotelian association of the necessary with the eternal.

With the chapters by David Wirmer (Chapter 7) and Cristina Cerami (Chapter 10) we are still in the realm of epistemology, since these studies concern his theory of intellect and his philosophy of science. Yet from Averroes’ point of view we would here be moving into natural philosophy, since the texts at issue are no longer treatises from the *Organon* but rather Aristotle’s physical treatises: the *Physics* itself, *On the Heavens*, and *On the Soul*. Cerami’s piece makes for an illuminating companion to Black’s because it explores the implications of Averroes’ firm commitment to empiricism and his conviction that an empirically based science can achieve proper demonstrative certitude. This is yet another case where the lurking threat of *kalām* is in Averroes’ mind. As Cerami points out, Ash‘arite voluntarism makes all natural events dependent on the untrammelled will of God. Against this Averroes wants to show that through sense experience we are able to grasp the powers of natural causes, powers that are possessed and yield their effects necessarily, as demanded in demonstrative science. This of course fits well with Di Giovanni’s proposal as to Averroes’ motivation in accepting the eternity of the universe.

As for *On the Soul*, unusually we have three commentaries on this text from the pen of Averroes, that is, an epitome, a paraphrase, and a lemmatized or long commentary. As previous research has shown, Averroes’ interpretation of *On the Soul* evolved considerably as he wrote and revised these commentaries. Wirmer gives us a good illustration of that process, and yet again of the way that Averroes’ thought was shaped by the need to respond to earlier thinkers of the Islamic world. In this case the relevant figures are Ibn Bājja and al-Fārābī. On Wirmer’s reading Averroes is directly reacting to his Andalusian predecessor as he develops a “reflexive” understanding of the intellect’s grasp of essences.

The fact that al-Fārābī, Avicenna, and Ibn Bājja keep featuring in these chapters as foils or inspirations for Averroes shows how inadequate it is simply to read his commentaries alongside the Aristotelian treatises. One cannot appreciate Averroes on Aristotle without appreciating the tradition of Aristotelian commentary to which he responded. (This includes Greek commentators who were available in Arabic translation, as is clear from Chapter 11, by Peter Adamson.) Furthermore, one needs to bear in mind that his Aristotle was not the same as ours. Where we are in the privileged

position of having critical editions based on Greek manuscripts from Byzantium, Averroes was at the mercy of his Arabic translations. He was well aware of the problem, as we can see from his efforts to compare multiple versions when he could (as with some books of the *Metaphysics*). A striking, though little-discussed, example is his exposition of the brief psychological treatises known as Aristotle's *Parva Naturalia*. This was a case where the version available to Averroes was markedly different from the Greek text. It is really more an "adaptation" than a translation. Rotraud Hansberger explores the consequences of this in Chapter 8, showing that the difference between the Greek and Arabic *Parva Naturalia* is crucial in understanding Averroes' approach to the text.

Rounding out the section of the volume on natural philosophy we have Chapter 9, by Joël Chandelier, which provides a much-needed overview of Averroes' contributions in medicine. Alongside religious sciences, this constitutes another thread in Averroes' wide interests, despite the overwhelming focus on the Aristotelian commentaries. He wrote commentaries on Avicenna's *Medical Poem*, on works by the great late ancient doctor Galen, several free-standing treatises, and most importantly his *General Principles of Medicine* (*Kitāb al-Kullīyyāt fī l-ṭibb*, known in Latin as *Colliget*). The sheer quantity of this output shows how important medicine was for Averroes. Chandelier's survey further suggests that here too Averroes was concerned to adhere to the epistemological strictures of Aristotelian science. This may be why he writes mostly at a rather theoretical or general level, raising the question of how extensive was his concrete medical practice (Chandelier observes that these treatises are "quite weak on the side of personal experiences in treatment").

Perhaps surprisingly for us but actually rather standard for the tradition,⁷ Averroes sees a close parallel between the methods and epistemic status of medicine and ethics. This becomes clear in Chapter 12, Frédérique Woerther's study of his *Paraphrase of the Nicomachean Ethics*. Like political philosophy (which Averroes addressed by writing a paraphrase of Plato's *Republic* or rather of Galen's own paraphrase of the same work), both of these are practical sciences that concern themselves with matters of "volition," that is, things that fall under human control. This suggests a degree of variability and contingency that evades the demands for universality and necessity we associate with an Aristotelian science. Averroes eliminates the difficulty by distinguishing a theoretical part within each practical science; the theoretical part of medicine is, as we have just seen,

⁷ As shown in Adamson 2018.

his main concern in the works on that discipline. Ethics may make use of methods that are germane to dialectic, proceeding on the basis of the “widely accepted premises” appropriate to that method. But he insists that the practical philosopher does move on to give proper demonstrations by eliminating what is doubtful from the dialectical propositions.

While natural and practical philosophy thus attains the demonstrative character and certitude limned in Aristotle’s *Organon* and contested in al-Ghazālī’s writings, there is to his mind a still higher science, the “first philosophy” pursued in Aristotle’s *Metaphysics*. It is here that Averroes can make good on his tacit promise to replace the *kalām* of Ash‘arites like al-Ghazālī with a philosophical theology grounded in Aristotelian premises. Yet that project turns out to have a stumbling block. God is treated not only in the highest science of metaphysics but also in natural philosophy, where he features as a cause of heavenly motion. Peter Adamson’s Chapter 11 looks at Averroes’ solution to this problem, which characteristically involves an appeal to a central Aristotelian distinction. There are four kinds of cause, namely formal, final, efficient, and material, and God exercises no fewer than three of these. In physics he is approached as an efficient cause of motion, while in metaphysics he appears as an efficient, formal, and final cause of being and unity.

It may be noticed how many chapters in the volume concern themselves with scientific method, and it is no coincidence that this has become something of a leitmotif. Averroes was the most self-conscious of philosophers, whose own method was never far from his mind as he put into practice what he learned from the *Organon*. The overall result, often obscure to us because most of his works are exegetical (and because, as noted above, he has so often been read as a source for later thinkers rather than as a thinker in his own right), was a consistent and systematic project. The aim was to replace the incompetent dialectic, scripture-based epistemology, and occasionalism of *kalām* with empirically grounded demonstrative science, so as to provide a sound basis for the intellectual life of Andalus under the Almohads. It is no wonder that he has been admired as the rationalist par excellence in Islamic intellectual history.⁸ In the past century or so he has been hailed by such figures as Jamāl al-Dīn al-Afghānī (d. 1897), Muḥammad ‘Abduh (d. 1905), Farah Anṭūn (d. 1922), and Muḥammad al-Jābirī (d. 2010). Most recently he has even inspired the

⁸ See von Kügelgen 1994.

famous novelist Salman Rushdie, who is pleased to call our attention to the resonance between his own name and that of Ibn Rushd.⁹

In the centuries following Averroes' death, the situation was rather different. At least up to the so-called Islamic Renaissance (*nahḍa*), in the nineteenth century, his influence in the Islamic world was dwarfed by that of his intellectual rival Avicenna, even as his commentaries became standard reading in their Hebrew and Latin versions. Indeed these texts are often lost in Arabic but preserved in one or both of these other languages. It is apt that Arabists, Hebraists, and Latinists must all be involved in the study of Averroes, because his works were at the nexus between Greek thought and philosophy within all three Abrahamic faiths. He was an Almohad thinker with a peculiarly "Almohad" mission: to "make one" the philosophical language spoken across all classical traditions of antiquity, Judaism, and Christianity, and of course Islam itself.

⁹ As in his short story "The Duniázát," published in the May 25, 2015, issue of the *New Yorker*. In an accompanying interview Rushdie says that he was inspired by the "philosophical battle between Ghazali and Ibn Rushd," which, he adds, may be "simplified" as "the opposition between faith and reason."

CHAPTER I

*Averroes, Philosopher of Islam**

Matteo Di Giovanni

The origin of a philosophy is always bodily “impure.” Ideas as much as their constructions are rooted in things. They are ideas of men, and men are expressions of concrete situations, challenges, and needs that await answers and demand guiding lines and global visions.

– Eugenio Garin

With these and other similarly eloquent words the Renaissance scholar Eugenio Garin expressed his intuition that all writing, including philosophical writing, is interwoven with the sociocultural context that provided the conditions for its emergence. The observation is not nearly as trivial as it may seem. There is an obvious sense in which men of letters and philosophers alike belong in atemporal worlds of ideas, inhabiting the *antique corti delli antiqui huomini* that Niccolò Machiavelli (d. 1527), another figure linked with the Renaissance, famously portrayed himself as entering clothed in *panni reali e curiali* in cloistered evenings free from quotidian labor. Indeed, the division between the cloister and the marketplace may apply to Machiavelli’s and others’ consumption of literature subsequent to its production, but it is not how ideas are produced in the first place. At the moment of creation all written exchange, including philosophical exchange, is prompted by and intended for a particular readership. It is this readership that furnishes the author with the cultural context and intellectual expectations to which his or her work is inherently and immediately addressed.

While this applies generally to every intellectual endeavor, it is especially true in the case of Averroes. Situated in a philosophical tradition that extolled the solitary life (*tadbīr al-mutawahhida*) described by Ibn Bājja (d. AD 1139) and celebrated disengagement of the kind personified by Ḥayy ibn Yaqzān from the pen of Ibn Ṭufayl (d. 1185), Averroes stood out for his active participation in the life of al-Andalus. He showed no hesitation

* I am grateful to Peter Adamson, Ziad Bou Akl, Frank Griffel, and the participants in the workshop “Interpreting Averroes” (Ludwig-Maximilians-Universität of Munich, October 8–9, 2015) for their valuable suggestions.

in asserting that, when a philosopher “turns to isolation and lives the life of a solitary, the best perfection is missing in him, for that can be attained by him only in [the] city.”¹ True to this principle he assumed several offices as judge, first of Seville (1169) and subsequently of Cordoba (1171), to be finally appointed as chief judge of the capital city in 1180. Around the period of his second mandate in Seville (1179) he did not refrain from launching into an open polemic against detractors of philosophy. His response in the *Decisive Treatise* (*K. Faṣl al-maqāl wa-taqrīr mā bayna l-sharī‘a wa-l-ḥikma min al-ittiṣāl*) was all but apologetic, going so far as to enjoin whole sectors of society – to wit, all capable Muslims – to engage with professional philosophy. Also Averroes’ legal treatise of *ikhtilāf*, his so-called *Jurist’s Primer* (*Bidāyat al-mujtahid wa-nihāyat al-muqtaṣid*), has been described as the blueprint for a legal reform designed to transform mores and conventions throughout the caliphate of Spain.² Unique among the exponents of Arabic philosophy Averroes had “an evident wish to take part in the life of the community . . . Others of its exponents had been ministers and close to princes, but he alone undertook what he did within the framework of *fiqh*, the only truly stable framework, and made himself known in the field.”³

In glaring contrast to these historical records, the significance of Averroes’ context in twelfth-century Andalusia is still strikingly underinvestigated. There are of course a large number of studies in the social and intellectual history of Islamic Spain, alongside an overwhelming amount of sophisticated scholarship on Averroes as a philosopher *tout court*. Yet the critical points of intersection between these two ambits are by and large untouched territory. We are routinely presented with a *dimidiatus Averroes*: either a mere engagé intellectual divorced from his philosophical self or a mere *res cogitans* abstracted from his historical context. In either case, his all-round profile as a *Muslim philosopher* – where the conjunction of both terms is of the essence – fails to be appreciated as fully and integrally as it ought to. This chapter aims to bridge the existing divide in scholarly approach. In what follows I shall analyze two doctrines that are considered to be highly distinctive of Averroes’ philosophy. I shall discuss them with the aim of unearthing their ties with the circumstances surrounding Andalusian society in Averroes’ day. In the end, I hope to show that an adequate appreciation of the concerns typical of this society can afford an invaluable vantage point for identifying the trajectories of Averroes’ philosophy just as such, and on its own terms.

¹ *Paraph. Republic*, at Averroes 1974: 78, slightly modified.

² Fierro 1999.

³ Urvoy 1992: 871.

The two doctrines that I am going to consider are none other than those which the founding father of Averroean studies, Ernest Renan, following a long history of studies (and condemnations) of Averroes in the Latin West, described as the signature of his philosophy: the uniqueness of the human intellect and the eternity of matter.⁴ While I take this description as essentially correct, my objective is to show that even these doctrines for which Averroes became universally known in the West cannot be understood in isolation from the indigenous context from which they arose. This is the context of Andalusian Islam at the time of Averroes' flourishing, that is, Islam as championed by the Almohad caliphate. Almohadism developed into a sophisticated ideology revolving around the authority of the "Proof of Religion" (*ḥujjat al-Islam*), Abū Ḥāmid al-Ghazālī (d. 1111). It is, consequently, in constant dialogue with the teachings of al-Ghazālī that Averroes shaped his major philosophical views. The precise terms of Averroes' anti-Ghazālīan polemic are left implicit in his discourse more often than his up-front attack in the *Incoherence of the Incoherence* would lead one to believe. For this reason, casting light on the original drive of his philosophy means, first and foremost, bringing out the systematic reversal of al-Ghazālī's dogmatics, which informs Averroes' project all through. To see this reversal in action we need first of all to consider Almohadism itself, its emergence as a religious movement, and its relation to the course of Averroes' undertaking.

Almohad Islam, the Horizon of Averroes' Philosophy

"Almohadism" notoriously designates a movement and ideology of twelfth-century Berber combatants who professed a radical version of the Islamic *tawḥīd*, whence their appellation of *al-Muwahḥidūn*. The movement gathered around the figure of the infallible Maḥdī Abū 'Abd Allāh Muḥammad ibn Tūmart (d. 1130). The nature of the movement is best detectable from its earliest interactions with the then ruling dynasty of Andalusia: the Almoravids. Virtually all that Almohadism aimed to represent was the complete reverse of the traditional values championed by the Almoravids. While the latter sponsored the practice of *taqlīd* in legal matters, which meant reliance on authoritative opinions (*furū' al-fiqh*) stemming from the sources of law (*uṣūl al-fiqh*) as branches (*furū'*) from the roots (*uṣūl*), the Maḥdī Ibn Tūmart called on his disciples to revive the study of *uṣūl*. In fact, Ibn Tūmart is regarded as the first to have

⁴ Renan 1861: 107–8.

transmitted the science of *uṣūl*, then flourishing in the East, to the Islamic West. He had a clear predilection for theoretical analysis over pragmatic or casuistic approaches such as displayed by practitioners of *taqlīd*. Following this inclination he imported into Andalusia also another theoretical science that had blossomed in the East: the science of *kalām*. His *Profession of Faith* (*ʿAqīda*) opens with the pivotal claim that true worship (*ʿibāda*) presupposes knowledge (*ʿilm*), which in turn requires study (*ṭalab*).⁵ Intellectual endeavor is thus presented as part and parcel of religious devotion, to the point that religion itself, in the words of Ibn al-Qalānīsī (d. 1160), consisted for Ibn Tūmart in a “religion of thought” (*madhhab al-fikr*).⁶ No wonder that such knowledge was styled “the most precious treasure that can be sought after” (*aʿazz mā yuṭlabu*), which became the general title of Ibn Tūmart’s writings.⁷

The gist of this knowledge is encapsulated in the self-evident truth according to which all actions require an agent (*al-fiʿl lā budd lahu min al-fāʿil*).⁸ This points immediately to a Creator of all nature, so that God’s existence becomes known by the necessity of reason (*bi-ḍarūrat al-ʿaql*).⁹ The rationalistic epistemology implicit in this claim is a striking feature of Ibn Tūmart’s doctrine. Suffice it to recall that only one century earlier the leading theologian Abū Bakr al-Bāqillānī (d. 1013) had categorically denied that God could be known independently of revelation.¹⁰ At the same time, the rationalism of Ibn Tūmart was tempered in one important respect by the apophatic outcome of his theology. Since God is the cause of creation, and since every cause transcends its effect, God transcends all things: He is the one whom “no mind comprehends, no imagination represents, no thought reaches, no intellect conceives” (*lā taḥudduhu l-adhbhān wa-lā tuṣawwiruhu l-awhām wa-lā talḥaquhu l-afkār wa-lā tukayyifuhu l-uqūl*).¹¹ As a result, while God’s existence can be known by unaided reason – to the point that, indeed, “the way of *tawḥīd* is rational thinking (*ʿaql*)”¹² – God’s essence is bound to escape all attempt at grasping it. The doctrine has an important implication for the approach to the Holy Book. The Qurʾān is filled with anthropomorphic descriptions of God: these should be neither taken at face value after the fashion of sheer anthropomorphism (*tajāsīm*) – because God transcends such attributes – nor explained away through speculative interpretations

⁵ Ibn Tūmart 1903: 230.2–3.

⁶ Ibn al-Qalānīsī 1908: 291.18.

⁷ Ibn Tūmart 1903: 2:2 of the collection (*sif*). Cf. Griffel 2005: 767 n. 47.

⁸ Ibn Tūmart 1903: 230.12.

⁹ Ibid., 230.6.

¹⁰ Al-Bāqillānī 1958: 40.1–6.

¹¹ Ibn Tūmart 1903: 240.8–9.

¹² Ibid., 47.13–14.

(*ta'wīl*) as common among Mu'tazilites. Instead, they should be accepted with no qualification or characterization (*min ghayr tashbīh wa-lā-takyīf*)¹³ along the lines developed by Ash'arism.

This notion was key in realizing the strategic goal of the Almohad party: overthrowing the Almoravids. Ibn Tūmart was not so much an intellectual as a warrior driven by military and political ambitions, to which doctrine itself was subordinated. Hostile intentions had become manifest since his public confrontation (1120) with the Almoravid ruler 'Alī ibn Yūsuf (d. 1143). We are informed by Shams al-Dīn ibn Khallikān (d. 1282) that "Ibn Tūmart, whilst retiring from the king's presence, kept his face turned towards him till he left the hall, and some persons having said to him: 'We see that you [showed] respect to the king in not turning [your] back to him,' he replied: 'My intention was to watch vanity as long as I could, until the time come that I may change it.'"¹⁴ On the same day "the persons present perceived from the drift of this discourse that the speaker aspired to the possession of the kingdom."¹⁵ Their perception was true. The new theology was rapidly put at the service of war, and the precept of *jihād* against unbelievers was elevated from the status of a mere collective duty (*farḍ kifāya*) to a special pillar of religion.¹⁶ Concurrently, unbelief (*kufṛ*) was defined in an unusually broad way to include mere heterodoxy such as professed by the Almoravids. To the extent that the Almoravids lacked a theology to guide their approach to Scriptures, they were bound to fall – or so it was held – into sheer anthropomorphism (*tajsīm*).¹⁷ Fighting the anthropomorphists (*qitāl al-mujassimīn*) became the battle cry of Ibn Tūmart's day,¹⁸ and a key role was played by the teachings of al-Ghazālī. In his *Incoherence of the Philosophers* the Ash'arite theologian had established that heterodoxy by itself constituted unbelief: it was an aberration from true faith (*kufṛ ba'da imān*) resulting in clandestine apostasy (*zandaqa*), which in principle legitimized the holy war on purely doctrinal grounds as practiced by Ibn Tūmart.¹⁹

The figure of al-Ghazālī was crucial to the Almohad movement also in a broader sense. Arabic sources relate that Ibn Tūmart joined al-Ghazālī as his student in the 'Abbāsid capital, where he traveled, in compliance with the pious practice of *riḥla*, to be turned into an "overflowing ocean of science and a blazing fire of religion" (*baḥr mutafajjir min al-'ilm*

¹³ Ibid., 233.1.

¹⁴ Ibn Khallikān 1868: 210, slightly modified; Arabic at Ibn Khallikān 1977: 50.16–19.

¹⁵ Ibn Khallikān 1868: 209; Arabic at Ibn Khallikān 1977: 50.5–6.

¹⁶ Fromherz 2010: 184–86.

¹⁷ Serrano 2005.

¹⁸ Ibn Khaldūn 1971: 228.10.

¹⁹ Griffel 2009: 103–5.

wa-shihāb wār min al-dīn).²⁰ On learning that his *Revivification of Religious Sciences* (*Ihyā' 'ulūm al-dīn*) had been disgraced by the Almoravids, al-Ghazālī reportedly invoked their dethronement, thus eliciting a devout pledge from the future Mahdī: “May that be done at my hand, if God wills!”²¹ The historicity of the encounter has been doubted since al-Ghazālī left for Khorasan several years before Ibn Tūmart made his appearance in Baghdad. At the same time, it has been argued that the two might have met in Alexandria, which Ibn Tūmart visited on his way to the East and where al-Ghazālī purportedly sojourned around the year 1107.²² Even if Ibn Tūmart never met al-Ghazālī, he must have met with his teachings as perpetuated by his successor at the Baghdad Nizāmiyya, the shāfiʿī jurisconsult Abū Bakr al-Shāshī (d. 1113).²³ In a sense, even supposing that the story is a later fabrication would corroborate the thesis of a calculated affiliation of the Mahdī to the authority of al-Ghazālī. Whether true or not, finally, the story gained wide currency as attested by Averroes’ student Abū l-Ḥajjāj ibn Ṭumlūs of Alcira (d. 1223). He informs us that the Mahdī “clarified the questions that bothered people and invited them to study the books of al-Ghazālī, making them see that his doctrines were in agreement with his own.”²⁴ In this way Ibn Ṭumlūs fleshes out other similar claims by Ibn Khaldūn (d. 1406), according to whom Ibn Tūmart studied under Ashʿarite masters and commanded adherence to their teachings,²⁵ as well as the earlier ‘Abd al-Wāḥid al-Marrākushī (d. ca. 1228), on whose account “the gist of what he used to proselytize was religious instruction adhering to Ashʿarism.”²⁶

The reasons for this endorsement are not difficult to see. Al-Ghazālī was a powerful symbol of the conflict at play and the emblem of an intellectually sophisticated approach to religion of the kind that was opposed by the Almoravid establishment. The champion of a strand of Ashʿarite *kalām* that entertained an intense dialogue with philosophy and made ample recourse to rational arguments, the “Proof of Islam” stood out as the upholder of a judicious use of reason in matters of theology. His embrace of *kalām* and opposition to uncritical emulation (*taqlīd*) were among the factors that had alienated him from Mālikī conservatives of Andalusia and the Almoravid establishment under their influence. In 1109 Mālikis had persuaded the prince ‘Alī ibn Yūsuf to decree the burning of al-Ghazālī’s

²⁰ Ibn Khaldūn 1971: 226.19. ²¹ Ibn al-Qaṭṭān 1990: 73.15–16.

²² Fletcher 1997: 305–9. Cf. contra Griffel 2005: 753–56. ²³ Langhade and Mallet 1985: 105.

²⁴ Fletcher 1997: 315. ²⁵ Ibn Khaldūn 1971: 226.19–26.

²⁶ Al-Marrākushī 1847: 132.16–17, my translation. English translation of the context in Williams 1971: 210–15.

monumental *Revifcation* in the great mosque of Cordoba.²⁷ The episode may have followed signals, understandably alarming to the Mālikis, that al-Ghazālī was working to ingratiate himself with the Almoravid ruler.²⁸ Certainly it marked the high point of the Almoravid anti-Ghazālīan policy in a way that would be easily exploited by the Almohads, eager to capitalize on a *casus belli* calling for vindication and restoration of true religion. In this way al-Ghazālī became the symbol of what Almohadism intended to represent: a celebration of theological reason, a “religion of thought” in the words of Ibn al-Qalānīsī, and a rebellion against the obscurantism of the ruling power.

This is the situation that presented itself to the young Averroes when the Almohad forces arrived in the country (1147), soon after an expedition of Alfonso I El Batallador (d. 1134) had humiliated Almoravid commanders and shaken their leadership. The domination that ensued was intolerant of dissension. All subjects, literates and illiterates alike, were enjoined to memorize the Mahdī’s dogma on penalty of death. The state was firmly controlled through a network of scholars (*ṭalaba*) subsidized by the regime, and Averroes might have been one of them.²⁹ Certainly he sought the favor of the ruling class, on which he depended for the realization of his scholarly ambitions. Evidence thereof is not lacking in the Averroean corpus: the Almohad regime is extolled as a state that is founded on religious law, where philosophy would blossom as in the ideal city described by Plato.³⁰ The Mahdī himself is credited with a stunning theology (*ṭarīq ‘ajīb*) in a version of the *Exposition*.³¹ Moreover, the famous *barnāmaj* in MS Madrid, Escorial 884 lists a treatise on *How He Entered into the Service of the All-Powerful Rule* (*Maqāla fī Kayfiyyat dukhūlihi fī l-amr al-‘azīz*), namely the Almohad rule,³² and even a commentary on Ibn Tūmart’s *Profession of Faith* (*Sharḥ ‘Aqīdat al-Imām al-Mahdī*), which is alleged to be partly extant and might, in conjunction with other indications, point to some involvement of Averroes in the redaction of Tūmartian dogmatics.³³

²⁷ Accounts differ as to the role played by Mālikī scholars; see Urvoy 1992: 866–67 and Griffel 2005: 754 n. 2.

²⁸ Fletcher 1997. ²⁹ Huici Miranda 1956: 89–95; Urvoy 2005: 124, cf. Urvoy 1998: 110–11.

³⁰ *Paraph. Republic* 180, 227. For the problems posed by more critical passages on Almohad society, see Geoffroy 2005b: esp. 733 n. 23.

³¹ Geoffroy 2005a: 888.

³² The list of Averroes’ works that is provided in the *barnāmaj* was printed by Renan 1861: 462–65; see esp. 464.4–5 and 464.17. The title of Averroes’ *maqāla* is interpreted in accord with al-‘Alawī 1986: 40.

³³ Fletcher 2012: 190–91. Bin Sharīfa 1999: 47–48 published an extract of the commentary.

It would be a mistake, however, to conclude that Averroes was an intellectual on the payroll of power. Quite the opposite, he was a fiercely independent mind with a clear vision of what Almohad society was to become through his own efforts: one in which philosophy would no longer be a *divertissement* for few individuals consigned to the solitary life that was celebrated by Ibn Ṭufayl, but an activity universally honored and socially recognized as a religious duty specifically incumbent on (*sharīʿa khāṣṣa*) every capable Muslim.³⁴ Indeed, if Averroes was no warrior like Ibn Ṭūmart, he was nonetheless a combatant spirit, willing to fight the good fight to transform Almohadism itself much as Almohadism had transformed the Almoravid status quo. As a state official he could not enter an open confrontation similar to that launched by Ibn Ṭūmart against the ruling power. At the same time, his services to the Almohad dynasty gained him increasing distinction and placed him in a position to negotiate his reform from within the ruling establishment. As argued above, the Almohad ideology extolled the value of reason within religion. The natural strategy toward securing official sanction for philosophy itself was, therefore, to maximize this rationalistic imprint. Averroes outdid the Maḥdī as a zealous follower of the “religion of thought” accentuating his intellectualistic approach to various aspects of Islam. In *fiqh* he advocated generalized recourse to critical judgement (*ijtihād*), obliterating Ibn Ṭūmart’s restrictions.³⁵ In the same vein, he considered it the task of natural reason to determine the ethical value of actions, thus abandoning the theistic subjectivism that was defended by the Maḥdī: “For [in that case] there would be no essential good in the present world but [only] posited [good], and [similarly] there would be no essential evil . . . All these are views similar to those [propounded] by Protagoras.”³⁶ Most emblematically, Averroes relied on a famous verse in the Qurʾān (3:7) stating that “No one knows its [true] interpretation except God and those firm in knowledge; they say ‘We believe in it. All [of it] is from our Lord,’” and on its basis defended a liberal use of *tawʾīl* that Ibn Ṭūmart had rejected on a different reading of the very same verse (“No one knows its [true]

³⁴ *LC Metaphysics* 10.11. On the subject, Taylor 2012.

³⁵ Fierro 1999: 232, 244. Reserving legal elaboration for himself, Ibn Ṭūmart dictated that individual judgement play no role in religious law (*al-ʿaql laysa lahu fī l-sharʿ majāl*), as interpreted by Goldziher in Ibn Ṭūmart 1903: 44.

³⁶ Averroes 2010: 180, Arabic at Averroes 1994b: 173.6–11. Cf. along the same lines the section on divine justice in *Exposition* 234–39, Eng. at Averroes 2001c: 115–21. In his tract on religious practice (*ʿibāda*) immediately preceding the *Profession of Faith*, Ibn Ṭūmart denies objective ethical value to human acts; cf. Fromherz 2010: 176–78.

interpretation except God; those firm in knowledge say ‘We believe in it. All [of it] is from our Lord’).³⁷ Little wonder that Ibn Tūmart distrusted such recourse to rational interpretation: for him, as mentioned, God’s essence remained concealed to human understanding even though His existence was established as a necessary truth of reason. For Averroes, by contrast, the nature of God qua first form, mover, and end of the universe was precisely the end point of philosophical inquiry, leading to conclusions that are indeed informative and even apodictic.³⁸

Reforming Almohadism in the way that Averroes attempted, however, required more than substituting strong *philosophical* for more restrained *theological* reason of the kind iconized by al-Ghazālī. For him, it meant first of all clearing away the perceived enemies of philosophy, chief among whom was al-Ghazālī himself. All ties between traditional *kalām* and Tūmartian Almohadism should be severed. The flaming torch of enlightened Islam that had been carried by the Almohad state against traditionalists and proponents of *taqlīd* should be personified by not al-Ghazālī but Aristotle, in whom, indeed, “truth reached perfection”³⁹ and a path of thorough study opened up to the elite of philosophers. It is in this sense that we should interpret Averroes’ praise of the “triumphant rule” at the end of the *Decisive Treatise*, by which God “has opened a way to many benefits, especially to the class of persons who have trodden the path of study and sought to know the truth. This [He has done] by summoning the masses to a middle way of knowing God the Glorious, [a way] which is raised above the low level of the traditionalists (*ḥaḍīd al-mutaqallidīna*) but is below the turbulence of the theologians (*tashghīb al-mutakallimīna*); and by drawing the attention of the elite to their obligation to make a thorough study (*al-naẓar al-tāmm*) of the principles of religion.”⁴⁰

Addressed ostensibly to the prince to whom its accompanying epistle, the so-called *Appendix* (*Ḍamīma*), was dedicated – possibly the caliph Abū Ya‘qūb Yūsuf (d. 1184)⁴¹ – this eulogy expresses not so much the historical reality of Almohadism as Averroes’ own obliquely, obsequiously framed exhortation for the establishment to implement an interpretation of Almohadism along the lines that he himself would encourage. Essential to this project was severing Almohadism’s affiliation with the master of Tūs. This became the obsessive drive of Averroes’ argument as a

³⁷ Urvoy 1998: 139–42.

³⁸ See Di Giovanni 2014 and Chapter 11 in this volume.

³⁹ *LC Metaphysics* 10.8.

⁴⁰ English translation from Averroes 1967: 71, slightly modified; Arabic at *Decisive Treatise* 40.10–15.

⁴¹ Mahdi 1964: 118–19; cf. Hourani’s remarks in Averroes 1967: 117.

philosopher, most of which stands in direct opposition to the principles of al-Ghazālī's epistemology. Averroes' dispute with al-Ghazālī has been extensively investigated with reference to his massive refutation in the *Incoherence of the Incoherence*. Frank Griffel has illustrated the progression of Averroes' dissociation from al-Ghazālī in matters of *fiqh*, from the early *Abridgement* (*Ḍarūrī fī uṣūl al-fiqh*, 1157) to the *Jurist's Primer* (*Bidāyat al-mujtahid*), composed eleven years later (1168), which itself preceded by a dozen years the composition of the *Incoherence of the Incoherence* (1180).⁴² What remains to be explored is how the anti-Ghazālīan polemic operated within the fabric of Averroes' philosophy, the scholarly endeavor that he himself regarded as the main, truly "demonstrative" leg of his work.

Averroes' Philosophy in Context: The Deliverance from Al-Ghazālī

One of al-Ghazālī's major contributions was his definition of a criterion for allegorical interpretation of Scripture (*ta'uīl*). He established that the literal wording of the Qur'an should be taken at face value except when manifestly contradicting other verses or rational arguments: "One can only deviate if there is a proof" (*lā yutraku illā bi-dalīl*).⁴³ Reason was thus accorded a role within scriptural exegesis. At the same time al-Ghazālī set a decisive constraint to the application of his own criterion. In effect nothing could be proven rationally concerning the afterlife and the supramundane: "No rational argument averts that what has been promised with regard to paradise and hell in the afterlife will happen."⁴⁴ What lies beyond the world of experience was thus excluded from rational investigation, being the exclusive domain of a nonrational, and indeed suprarational, experience resulting in immediate acquaintance (*dhawq*) of the kind pursued by Ṣūfis.

This teaching threatened to strike a fatal blow to the pretensions of philosophical reason, whose first remit – the remit of first philosophy – consisted in rational inquiry into the divine. Averroes had no choice but to refute al-Ghazālī and his adherents by proving that philosophical knowledge of all reality, no matter how far removed from sense experience, was indeed possible. On this topic he engaged in a polemic with certain thinkers who ruled out all forms of knowledge other than sense-perception to then conclude that only what is sensible existed, for all that exists is knowable. Averroes agreed that what exists is knowable but objected that to know is more than to perceive. While some entities are known through sense-perception, others can be known by reason, and the allusion is to the

⁴² Griffel 2002.

⁴³ Al-Ghazālī 1904–6: 92.8.

⁴⁴ Griffel 2009: 111–16, esp. 115.

transmundane realm of separate substances exempt from matter.⁴⁵ More explicit is a passage from the *LC Physics*, where Averroes discusses the views of the Ancients and addresses the possibility of knowing the divine (*res divina*). In the text that he comments on, Aristotle explains that some of the Ancients denied the existence of chance (τύχη); others not only acknowledged chance but dignified it to the point of making it responsible for celestial motion. Still others posited chance as existent and yet “inscrutable to human intelligence, as being a divine thing and full of mystery” (196 b 6–7). Averroes laments that such language is a clear aberration (*iste sermo est irrationabilis*), and the crucial reason is that it makes the divine by nature unknowable.⁴⁶

The rationale for the divine realm being fully accessible to natural reason is explicated in another text from *LC Metaphysics*. Averroes grapples with a potential hindrance to his epistemic optimism. Through a famous image Aristotle claims that human understanding is as incapacitated toward “the things which are by nature most evident of all” as are bats’ eyes to the blaze of the day. This would seem to justify the kind of epistemology embraced by al-Ghazālī, and Averroes hastens to specify that, if the things that are evident by nature are not evident to us, which occurs for lack of immediate contact with the senses, “this does not indicate that it is impossible to conceptualize the separate entities in the way that it is impossible for bats to contemplate the sun. If this were so, nature would have acted in vain, in that it would have made that which is in itself naturally intelligible to another not intelligible to anything, as if it had made the sun perceptible to no eyesight.”⁴⁷ Averroes invokes the teleological principle according to which nature does nothing in vain: if there is a substance that is free from matter, and hence intelligible by nature, it *must* be possible to intelligize it.

Having established that separate substances must be accessible to reason, Averroes needed to show that the human intellect is in fact capable of coming into contact, or conjoining, with them. To this purpose he constructed his famous theory of conjunction (*ittiṣāl*) between the human and the agent intellect. The agent intellect is the separate substance that is closest to us since “the human intellect in actuality is nothing else than the conceptualization of the order and system present in this world” and “the quiddity of the intellect which brings about this human intellect – that is, the agent intellect – is not distinct from the conceptualization of these things. For that reason one says that the active intellect thinks the

⁴⁵ *Paraph. On Generation and Corruption* 26; English at Averroes 1958: 20–21.

⁴⁶ *LC Physics* 66rA. ⁴⁷ *LC Metaphysics* 8.9–13.

things of the present world.”⁴⁸ Indeed, when the human intellect becomes fully actualized as a result of lifelong intellectual exercise, it becomes undistinguishable from the agent intellect, because both are then fully actual and their contents are the same. The human intellect can thus know the agent intellect, and hence conjoin with it, simply by knowing the intelligibles that it hosts in itself. Moreover, once the agent intellect is conjoined with us, “we will understand the other separate entities in virtue of it.”⁴⁹ Through conjunction with the agent intellect we acquire knowledge of all separate intellects. After all, the agent intellect is but a reflection of the higher intellects in the cosmic hierarchy, which it contemplates from all eternity:

As in this [relation between the human intellect and the agent intellect], so it applies also to the intelligible [object] of the intellect which brings about the agent intellect that it is nothing else than the intelligible [object] of the agent intellect, since it is of the same species as this, except that it is [the object of thought] in a nobler way. And this goes on up to the first principle which thinks being in the noblest of all the ways immaterial intellects can be superior to one another. For necessarily its intelligible [object] does not differ in species from the human intelligibles, and all the more [does it not differ in species] from the remaining intelligibles of the other separate [intellects]. However, it is very much distinct from the human intellect in terms of nobility.⁵⁰

This same point is stated in another text from the epitome of metaphysics. Every subordinated intellect receives its noetic content – i.e., its form – from the intellect to which it is subordinated, namely the intellect by which it is caused: “When we assume that some of these [intellects] are caused through others, that which is caused must conceptualize its cause . . . For that which is caused cannot conceptualize its own essence without conceptualizing that which constitutes its essence . . . From this it becomes evident that some of these are principles for others qua formal as well as qua efficient and final [causes].”⁵¹ The chain of cosmic intellects consists in the perpetual passing down, from the highest cosmic intellect (God) to the lowest (the agent intellect), of an identical set of intelligibles

⁴⁸ Averroes 2010: 159–60; Arabic at Averroes 1994b: 155.19–156.2.

⁴⁹ Averroes 2009: 387, slightly modified. Cf. also *ibid.*, 386: “[The material intellect] understands [the agent intellect] and we understand the other separate entities through [the agent intellect],” slightly modified; Latin at *LC On the Soul* 484–85.

⁵⁰ Averroes 2010: 160; Arabic at Averroes 1994b: 156.12–18.

⁵¹ Averroes 2010: 157–58, slightly modified; Arabic at Averroes 1994b: 153.15–22.

that, qua identical, belong to “the same species,” albeit residing in lower intellects with lower degrees of uniformity and simplicity.⁵²

This is the ultimate reason why conjunction with the agent intellect is conjunction with God himself. As stated in the *LC Metaphysics*, “we must ultimately be in contact with this separate intellect [i.e., God] so that we depend on such a principle, on which the heaven depends, as Aristotle says.”⁵³ Evidently man has the power to immerse himself in God’s own mind through conjunction following mere “study and speculation,”⁵⁴ unaided by revelation or a prophetic message. Scholars have called attention to the mystical tinge of such theories, where cognitive identification with God (*ittiṣāl*) is the philosophical analogue of mystical union (*ittiḥād*). Joaquín Lomba has coined the formula “mística intelectual” for the cognate doctrine of Ibn Bājja,⁵⁵ and there is no doubt that conjunction was invested by philosophers with the same epistemic function that, for the mystics and al-Ghazālī, was performed by illuminative experience (*dhawq*). Most crucially, through his notion of conjunction Averroes could defuse al-Ghazālī’s criticism of philosophy as unable to deliver the full knowledge that was afforded by mystical illumination. On the contrary, by cognitively assimilating to God’s own mind, the philosopher partakes in God’s same omniscience. He is indeed omniscient as the First Mover of all nature, because all forms exist “in actuality in the First Mover in a manner similar to that of the existence of the artifacts in actuality in the soul of the maker.”⁵⁶ Through conjunction with Him “human beings, as Themistius says, are made like unto God in that He is all beings in a way and One who knows these in a way.”⁵⁷

In the end, the doctrine of conjunction ushers in the notorious theory of the unique intellect for which Averroes was most celebrated by scholars, just as quick to make it the signature of his philosophy as neglectful of its embedment in the Andalusian struggle over al-Ghazālī’s heritage. The doctrine featured in both condemnations issued by Stephen Tempier (d. 1279), bishop of Paris with jurisdiction over the University, in 1270 and again in 1277: it opened the 1270 list of condemned propositions – “*Primus articulus est quod intellectus omnium hominum est unus et*

⁵² For Averroes’ essentially unvaried treatment of the topic in his *LC Metaphysics*, see Di Giovanni 2006.

⁵³ Averroes 1984b: 157; Arabic at *LC Metaphysics* 1613.2–4. ⁵⁴ Averroes 1982b: 103.

⁵⁵ Lomba 1997: 54. ⁵⁶ Averroes 1984b: 112; Arabic at *LC Metaphysics* 1505.3–5.

⁵⁷ Averroes 2009: 399; Latin at *LC On the Soul* 501.

idem numero” – and was reiterated in 1277 (“*Quod intellectus est unus numero*”).⁵⁸ Averroes concluded that the human (possible) intellect was a self-subsistent substance entirely unmixed with matter, and therefore eternal. For this reason, the intellect must be unique for all humans and immune to numerical multiplicity, because numerical multiplicity arises from matter alone.⁵⁹ This solution followed a long history of tormented cogitations; its trajectory led Averroes to define this intellect first as a corruptible disposition in man’s imagination unmixed with matter, subsequently as a principle equally unmixed with matter but intermediate between a pure disposition and an independent substance, and hence still subject to corruption. More relevant here are the underlying motivations for this evolution. As has been argued, these may reside in Averroes’ attempt to make the human intellect fully conformable to the intellectual souls of celestial bodies: these are both unmixed with matters (“not divisible on account of the divisibility of the body”) and existing of their own nature as self-subsistent substances. The two properties are progressively integrated in the description of the human intellect, from the earliest to the latest developments of Averroes’ noetics, until they are fused together in the final redaction of the *LC De anima*.⁶⁰

While such considerations may have played a role, the substantial concern leading Averroes to his view of the unique intellect as fully separate and eternal is made explicit by Averroes himself: “It seems to me that he who asserts that the material intellect is generable and corruptible can find no natural way by which we can be conjoined with the separate intellects.”⁶¹ Since conjoining means for the human intellect to receive a separate substance, “it will happen that something generated receives something eternal and is made like it, and in this way what is generated will become eternal, which is impossible.”⁶² Clearly, the eternity of the human intellect is a necessary condition for the possibility of conjunction. For this reason – and, more fundamentally, because conjunction is the ultimate response to the attacks on philosophy’s epistemic claims – the human intellect needed to be posited as an eternal substance free from all matter. For the same reason, in the end, Averroes became widely (and almost only) renowned as the upholder of a theory where the intellect, being thus eternal and immaterial, was necessarily one for all

⁵⁸ Text of the condemnations in *Chartularium Universitatis Parisiensis* I.487, 545. Cf. Hissette 1977: 191–92.

⁵⁹ Di Giovanni 2007: 207–9. ⁶⁰ Geoffroy and Steel 2001: 71–80.

⁶¹ Averroes 2009: 383; Latin at *LC On the Soul* 481.

⁶² Averroes 2009: 387; Latin at *LC On the Soul* 485.

mankind, to the blame of countless detractors and the praise of as many admirers over the course of centuries.

A similar case can be made for the other celebrated view of Averroes, concerning the eternity of matter. Also this thesis, which is known as Averroean “materialism,” was targeted in the Paris condemnations of 1270 and 1277 (“*Quod mundus est aeternus*”).⁶³ Unlike the uniqueness of the intellect, however, the notion that the material constituent of nature exists over an infinite duration of time flows quite naturally from Aristotle’s own principles. These affirm that matter is a pre-condition for coming-to-be, so that, by pre-existing the inception of motion, matter pre-exists any temporal beginning. Nonetheless, the thread that runs through Averroes’ argument is yet again specifically configured to be a response to the pernicious claims of al-Ghazālī. Their harm is identified in a passage of the *Incoherence of the Incoherence*: “God knows that I should not have related a single one of their views [i.e., earlier philosophers], or regarded this as permissible, but for the harm which results from al-Ghazālī’s doings to the cause of philosophy (*ḥikma*); and I mean by ‘philosophy’ the inquiry into things in accordance with what is required by the nature of demonstration (*bi-ḥasab mā taqtaḍīhi ṭabī‘at al-burhān*).”⁶⁴ Al-Ghazālī was held responsible for hindering full recognition of philosophy as an apodictic science built on sound and solid demonstrative reasoning. His *Incoherence of the Philosophers* was conceived with the aim of exposing the presumed “inconsistency” (*tahāfut*) or lack of logical rigor of philosophical claims, including those that happened to agree with religious tenets such as the unity of God, his incorporeal nature, and the immortality of the soul.⁶⁵ Consistent with his skepticism about philosophical theories of the afterlife, al-Ghazālī’s target was above all metaphysics. Out of twenty theses branded in the *Incoherence of the Philosophers* as deviant from religion, as many as sixteen were upheld by philosophers in this field. As we read in the *Deliverance from Error*, “the majority of their errors were in metaphysics; for they were incapable of developing demonstrative argumentation (*burhān*) fulfilling the conditions that they set in logic.”⁶⁶

Toward the end of “founding the religious, scholarly, and intellectual community upon the only irrefutable truth attained by ἀπόδειξις, that is,

⁶³ *Chartularium Universitatis Parisiensis* I.487, 548–49. Cf. Hissette 1977: 149, 152.

⁶⁴ Averroes 1954b: 247, modified; Arabic at *Incoherence of the Incoherence* 410:6–8.

⁶⁵ Griffel 2009: 98–101.

⁶⁶ Al-Ghazālī 1959: 23.14–15. The text is discussed in Griffel 2009: 100.

demonstrative method,”⁶⁷ Averroes was compelled to demolish this representation of metaphysics as being essentially unscientific. The true status of metaphysics, he insisted, appeared from its comprising mostly arguments that are indeed productive of science, namely logical demonstrations (*barāhīn mantiqīyya*). Not only is metaphysics germane to logic – apodictic logic – in that it investigates the same subject matter on which this latter also operates;⁶⁸ metaphysics is in fact the very kind of demonstrative inquiry (*al-nazar al-burhānī*) described in an ancient source issuing from the prince of Greek Peripatetics, Alexander of Aphrodisias, of which Averroes represents the only, invaluable testimony.⁶⁹ This demonstrative character of metaphysics was established by the genius of Aristotle, prior to whom “no one said anything on which a demonstration (*burhān*) could be based.”⁷⁰ Aristotle supplied demonstrations appropriate to each and every subject (*al-barāhīn allatī takhuṣṣu maṭlūban maṭlūban*) discussed in his *Metaphysics*.⁷¹ Even the discussion that unfolds in *Met. Zeta*, so manifestly based on a dialectical analysis of various *endoxa* concerning substance, is interpreted by Averroes as Aristotle’s true and proper “demonstrative examination” (*fahṣuhu l-burhānī*).⁷²

The demonstrations that constitute metaphysics cannot, of course, be the same as the deductive reasoning described in *Posterior Analytics* A 2, where premises state the cause (αἰτία) of what is stated in the conclusion.⁷³ Aristotle is clear that in metaphysics we proceed reversely, from effects to causes; “for learning proceeds for all in this way – through that which is less intelligible by nature to that which is more intelligible.”⁷⁴ Graeco-Arabic learning had long elaborated on this inference from effects pointing, by way of signs, to their causes. It referred to it as a “proof” or “demonstration of sign” (τεκμηριώδης δέξις; Arabic: *burhān al-dalīl*).⁷⁵ Demonstrations of this kind are typically constructed from “evidences” (τεκμήρια) that work as demonstrative premises (προτάσεις ἀποδεικτικά) and are,

⁶⁷ Endress 1997: 41.

⁶⁸ “The majority of demonstrations in this science [i.e., metaphysics] are logical demonstrations [*barāhīn mantiqīyya*]. By ‘logical’ I mean here [demonstrations constituted by] premises that are taken from the discipline of logic ... When logical premises are employed in this science, they approximate to appropriate premises, because this discipline [i.e., metaphysics] studies absolute being, and it is for absolute being that logical premises, such as definitions, descriptions and so on, are laid down” (*LC Metaphysics* 749.1–9).

⁶⁹ For the characterization of metaphysics as a *nazar burhānī*, see *LC Metaphysics* 1399.11. On the evidence for the lost Alexander that is preserved by Averroes, see Di Giovanni and Primavesi 2016.

⁷⁰ *LC Metaphysics* 758.11–12.

⁷¹ *Ibid.*, 167.8–9.

⁷² *Ibid.*, 777.15.

⁷³ *Post. Anal.* A 2, 71b19–23; cf. *ibid.*, 71b29–31.

⁷⁴ *Met. Z* 3, 1029b3–5; English at Aristotle 1984a: 91.

⁷⁵ See on the subject Cerami 2014; Di Giovanni 2009: esp. 110–14; Elamrani-Jamal 2000.

qua “evidences,” necessary (ἀναγκάϊα) and irrefutable (ἄλυτα). After all, the task of demonstrations is to produce necessary knowledge that must, as such, derive from premises that are likewise necessary. Along with other conditions for necessary premises, evidences are required to state a predicative connection that is per se (καθ’αυτό): one in which the predicate is said of the subject by virtue of the subject itself.⁷⁶ That is to say, the connection between the effect and the cause for which the effect is evidence must hold per se. The cause must be connected to – or deducible from – the effect on account of the effect itself, as having a child is deducible from having milk.

In the case of material causes, this principle entails that matter should be likewise deducible from the natural kind of substance that it constitutes. On these grounds, representing matter as unrelated to such natural kinds, or species, would defy the principles of reason, “just as happens to those who are conversant with the strand of theology that is called Ash‘arism.” They “deny that specific forms necessarily require an appropriate matter (*ḍarūrat ikhtiṣāṣ al-ṣuwar al-naw‘iyya bi-mawāddihā*) to the point that we even find Avicenna, for all his renown in philosophy, claiming that a man can be generated from dust in the same way as a fly; which – assuming that he was indeed so persuaded and did not utter it simply to please his contemporaries – certainly occurred to him on account of his flirting with Ash‘arism.”⁷⁷ Conversely, those who make the species independent of matter embrace a view that is “far removed from that which is required by wisdom, and in fact destroys it (*qawl ba‘īd jidd^m ‘an muqtaḍā l-ḥikma bal huwa muḥṭil laḥā*)” as “for them men could be of a different configuration or constitution and still act as human beings.”⁷⁸ Most importantly, if matter is thus determined by the properties of the species, it is because matter is to the species what potentiality is to actuality. Potentiality is entirely determined by actuality with the same kind of hypothetical necessity that is demanded of matter. For potentiality is just for the sake of actuality⁷⁹ and, in this sense, by virtue of it, or per se in the terminology of the *Analytics*.

Establishing this rigid hylomorphism, with the attendant notion of matter as directed potentiality, entails a peculiar view of coming-to-be. Aristotle showed that coming-to-be consists in forms occurring in matter. If such occurrences come about by way of appropriate forms actualizing the pre-existent potentiality of matter, this means that matter is necessarily

⁷⁶ For this requirement, see *Post. Anal.* A 4, 73a34–b24. For its centrality in Averroes’ theory of signs, see Cerami 2015b, who also stresses the anti-Ghazālian drift of Averroes’ epistemology (67–68).

⁷⁷ *LC Metaphysics* 46.14–47.3.

⁷⁸ *Exposition* 199.9–20.

⁷⁹ *Met.* Θ 8, 1050a4–b5.

presupposed in coming-to-be, and therefore necessarily eternal, co-eternal with God and with the whole world originating from the perpetual interaction of the two. Such is the view that Averroes embraced in his unyielding adherence to the requirements of apodictic science and put forward as its requisite metaphysical underpinning.⁸⁰ By contrast, if forms were to occur as a result of radical emergence, by being created time after time and, as it were, merely juxtaposed to matter (in such a way that nothing would prevent also matter from being so created), this would open the way to utter occasionalism, centered on the contingent actions of an inscrutable will, and inevitably destructive to all prospects of a scientific understanding of nature. This is precisely the pernicious view that due to “the unbridled extravagance of their fantasies” (*ifrāt hādhā l-tawahhum*) the children of al-Ghazālī had upheld: “the view that something can proceed from nothing; because, if a form can be created, the whole can be created; and since the theologians of our religion believe that the agent acts only by creation and production from nothing, but could not witness any such thing in the things which act one upon another on earth, they said that there is one single Agent for all the existents . . . they denied that fire burns, water quenches thirst and bread satisfies hunger.”⁸¹ Such were the enemies of true wisdom, the path of “thorough study” opened up by triumphant Almohadism and yet, in Averroes’ view, damagingly blocked by them. Placed in their vanguard was Averroes’ foil: the *perversor philosophiae* avant la lettre to whom Averroes’ own philosophy and his vision owed so much of their steam and their glories, as of their immediate defeat.

⁸⁰ “The meaning of Aristotle’s doctrine that the synonym is generated from the synonym or near-synonym is not that the synonym makes by its essence and its form the form of its synonym, but that it makes the form of its synonym pass from potentiality into actuality; it is not agent in the sense that it brings to matter something from outside or something external to it” (Averroes 1984b: 109–10; Arabic at *LC Metaphysics* 1499.16–1500.2).

⁸¹ Averroes 1984b: 111, slightly modified; Arabic at *LC Metaphysics* 1503.10–1504.3.

*Dogmatics, Theology, and Philosophy in Averroes***Mokdad Arfa Mensia***Introduction**

Averroes' reflection on the Islamic community shows the typical features of a reformist mind: dissatisfaction with the status quo, diagnosis of causes, prescription of remedies.¹ The remedies involved clearing away all deviations within various strands of the Islamic tradition, so as to return to an original, authentic state. Two strands in particular are of importance here: philosophy and religious doctrine. The latter is understood broadly as falling within the scope not only of Islamic theology (*kalām*) but, more generally, of dogmatics, that is, the study of the principles of religion (*'ilm uṣūl al-dīn*).² The two are distinct disciplines, and a Muslim scholar could in principle work in dogmatics without practicing theology. History offers many examples, and Averroes is but one of them. It is important, therefore, first to distinguish between Islamic theology as it was expounded – and dismissed – by Averroes, and dogmatics, which Averroes upholds and substitutes for theology under the rubric of legal doctrine (*uṣūl al-shar'*, *uṣūl al-sharī'a*). As this doctrine concerns the sound understanding of religious dogmas (*'aqā'id al-milla*), the distinction between *uṣūl al-dīn* and *kalām* becomes for Averroes a contrast between “true” doctrine and theology, especially of the Ash'arites, whom he sees as the most significant deviating group. While surveying the developments of theological theories, Averroes advocates a kind of theoretical (*naẓarī*) “literalism” (*ẓāhirism*) that is consistent with his theory of the relationship between religion and philosophy. Philosophy provides the foundations for a sound

* Translated from the French by Matteo Di Giovanni.

¹ Averroes frequently invokes the parallel with medicine in his diagnosis of the diseases of the community and his prescription of a therapy for them. See *Exposition* 181–83.

² Cf. Taylor 2005: 189 and Abrahamov 2011. On the nature and specificity of Islamic theology (*kalām*), see Frank 1992.

understanding of religious doctrine, so that doctrinal formulations should be founded on philosophical truth.

Averroes' "Zāhirism" in Religion

Averroes discusses religious dogma in several of his writings, from among which we will focus on the *Exposition* (*Kitāb al-Kashf 'an manāḥij al-adilla fi 'aqā'id al-milla*), where Averroes asks which beliefs are made explicit by religious dogma (*al-zāhir min al-'aqā'id*) and are enjoined on the many (*jumbūr*).³ His goal is to restore the articles of faith to the original state in which they were laid down in religious Law (*al-shar' al-awwal*)⁴ by clinging to their exact formulations in the Qur'ān,⁵ the sound traditions of the Prophet,⁶ and the understanding of his earliest followers (*al-salaf*). The *Exposition* as a whole is shaped by a pair of guiding principles: attention to the immediate meaning (*zāhir*) of religious discourse and fidelity to the intention (*maqṣad*) of the Lawgiver. Averroes' overall program is to abide by the explicit teaching of religion in all matters of detail including the Law's content, its scope, and its formulation. For this purpose he examines what it is explicit in the Law, where it remains silent, and why God's wisdom (*sabab ḥikmī*) saw fit to declare some things while passing over others. The end result is a thorough scrutiny (*ta'ammul*) of the sacred texts in order to derive unambiguous religious principles.⁷

Religious Law is God's work (*ṣinā'a*), parallel to the work of creation.⁸ Both works proceed from divine providence, whose ends can be grasped through reflection on the workings of nature.⁹ Inasmuch as both are theologically structured, that is, directed at certain final causes, both make manifest God's wisdom, in that wisdom is "nothing more than the knowledge of the causes (*asbāb*) of existing things."¹⁰ These ends are taken to culminate in the overarching goal of happiness for all humans. On this account the Law is fully coherent, all its parts are interconnected and complementary, because everything contained in the Law is the product of a plan free of pointless action (*'abath*).

Within the same providential plan, the Lawgiver makes sure to guide humankind toward the knowledge of several truths by means of rational

³ *Exposition* 133. ⁴ *Ibid.*, 191. ⁵ *Ibid.*, 131. ⁶ *Ibid.*, 172, 174–75.

⁷ *Ibid.*, 190–91.

⁸ Averroes' view of the natural world as a product of God's work underlies several of his pronouncements, including his definition of philosophy (see *Appendix*, at Averroes 1972a: 21); the two arguments of the *Exposition* for God's existence, which are discussed below; and the comparison between the faith of the masses and that of philosophers (see *Exposition* 154).

⁹ *Exposition* 193–94. ¹⁰ *Ibid.*, 145, cf. 151.

examination (*naẓar*).¹¹ Grounded ultimately in the teachings of philosophy, this point is argued by Averroes in keeping with Muʿtazilite theodicy. Muʿtazilism affirmed that God in His benevolence (*luṭf*) marks the path of reason with certain guideposts, and the Muʿtazilite phrase for “the establishment of pointers” (*naṣb al-adilla*) is clearly echoed by Averroes.¹² In his understanding, the letter of the Law answers not only to the configuration of the physical world but also to that of men’s innate knowledge. The revealed text relates both to the pointers found in nature and the principles of knowledge that are instilled in men’s intellect so as to guide them to the truth.¹³ This guidance is the purpose of the Law and is itself directed at the ultimate goal of human faith and salvation.¹⁴ For this reason the Law is addressed to all, including the elite of philosophers (*khāṣṣa*), even though its primary concern is the multitude of believers.¹⁵ Indeed, religious instruction is tailored for the general public and its appreciation requires nothing more than average intellectual capacities.¹⁶ It methodically induces belief in certain basic dogmas, while omitting all questions beyond the reach of simple minds. It pays special attention to the coherence of the message in all its components so that the formulation of one dogma does not obscure the understanding of another.¹⁷

Standardly the term “apparent” (*ẓāhir*) applies to the usual and immediate signification of words,¹⁸ while in a more technical sense it is used for all communication that is addressed at the general public and commands various acts or beliefs. Here it is especially urgent to determine the “apparent” meaning of that which is commanded. This is the case with religious dogmas, for which Averroes indeed recommends adherence to the *ẓāhir* of scriptural claims, whether they concern the content of dogmas such as God’s existence or the argumentative paths (*manāhij*, *ṭuruq*) through which they are established, indicated (*nabbaha* ‘*alayhā*), and laid

¹¹ Some hesitation can be noticed about the expression that Averroes uses to designate the author of this plan: sometimes this is the Law, other times the Lawgiver (*al-shāriʿ*), that is, God or the Prophet. After all, the Law is laid down through the Prophet’s revelation (*wahy*), which originates in God.

¹² *Exposition* 204–5. ¹³ *Ibid.*, 153–54. ¹⁴ *Ibid.*, 168. ¹⁵ *Ibid.*, 193–94, 244.

¹⁶ *Ibid.*, 148, 172–73, 175, 189–90. ¹⁷ *Ibid.*, 173.

¹⁸ *Ibid.*, 182. The Arabic word *ẓāhir* can be translated as “external,” “apparent,” “evident,” “manifest,” or “preponderant”; the verbal phrase *ẓahara ʿalā* means having the aforementioned qualities. Other words are used by Averroes to indicate various aspects of the same notion. They are mostly derived from the Arabic roots of *naṣṣa* (“to make explicit mention”), *daʿā* (“to call”), *nabbaha* (“to call attention to”), *bayyana* (“to make clear”), *ashāra* (“to indicate”), *ʿarrafa* (“to make known”), *ṣarraḥa* (“to declare”) whether positively – for affirming something (*iṭbāt*) – or negatively for denying it (*nafy*).

out for all mankind to embrace.¹⁹ Averroes discusses the extent to which the Law offers detailed discussion of any given point. There is a certain limit past which the many should not venture by study or rational analysis; instead, silence is recommended concerning those issues that, on account of their complexity, threaten to alienate the common people from the essence of religion.²⁰

As he discusses the production of meaningful discourse and its reception, Averroes takes sides in a long-standing dispute concerning the *zāhir* and the Lawgiver's intentions. The dispute revolves around the different rhetorical registers that are used in Scripture, which have given rise over time to differing hermeneutical approaches. Averroes declares the *zāhir* to be only one scriptural register, which he contrasts with two others: that which requires interpretation (*mu'awwal*) and that which is inherently ambiguous (*mutashābih*). With regard to the former, he assumes that for the sacred text there is only one true understanding (*ta'wīl*). He often explicates that understanding with regard to its doctrinal import and its degree of relevance – or indeed obligatoriness – for the faith of common believers.²¹ Rival proposals, such as those made by religious sects, are generally dismissed as unjustified.²² Even when a given interpretation is legitimate but is too subtle or complicated, Averroes advises not disseminating it. All the more so when, in addition to being ill-founded, it may cast doubts on the *zāhir* and suggest that the Law as a whole is susceptible of arbitrary interpretation.²³

Presenting the Law as inherently ambiguous (*mutashābih*) should also be avoided.²⁴ The Lawgiver's pedagogical concern for clarity is consistent only with univocal discourse (*muḥkam*), a language entirely free from ambiguity and certainly anything that is intentionally incomprehensible. If everything in the Law were ambiguous, it would all stand in need of interpretation.²⁵ Instead, according to Averroes the *zāhir* exhausts the whole of scriptural semantics as originally intended by the Lawgiver.²⁶ In this way the Law retains its unity and coherence. *Zāhir* replaces “univocal” in Averroes' language as the opposite of “ambiguous,” which is not surprising given the centrality of the *zāhir* in his entire dogmatics. It is here, in the science of *uṣūl al-dīn*, that the *zāhir* assumes primacy and becomes even more prominent than it is in the sister science that studies

¹⁹ *Exposition* 135, 150. ²⁰ *Ibid.*, 148, 171–73, 175.

²¹ *Decisive Treatise*, at Averroes 1972b: 32; *Exposition* 248–51. ²² *Exposition* 133–34.

²³ *Ibid.*, 173; *Decisive Treatise*, at Averroes 1972b: 62. ²⁴ *Exposition* 173. ²⁵ *Ibid.*, 181.

²⁶ *Ibid.*, 174.

the principles of jurisprudence, closely associated with dogmatics in the traditional designation of “the two sciences” (*al-uṣūlān*).²⁷ Dogmatics and jurisprudence do indeed have something in common: they both consider fundamental principles and the kinds of inference pertaining, respectively, to religious dogma and legal practice. Unlike the case of dogmatics, however, in jurisprudence the *ẓāhir* is not a supreme norm. In determining the legal status of that which is signified, the *ẓāhir* is superior to that which is subject to interpretation, but inferior to the explicit text (*naṣṣ*) that is subject to no interpretation at all. In a legal context, the *ẓāhir* admits of degrees, and there is room for interpretation whenever it departs from demonstrative reason.²⁸ These distinctions will be put into practice in Averroes’ *Decisive Treatise* when he determines the legal status (*ḥukm sharʿī*) of philosophy in the light of Scripture.

The True Religion

Religious dogmas consist of teachings that the Law urges everyone to embrace in order to qualify as a Muslim believer (*muʿmin*).²⁹ The doctrines that they express and the arguments that they involve are all laid out in Scripture. Arguments are presented as inferential paths that believers should follow in their own reflection toward adherence to religion. These are the very inferences that are designed by the Lawgiver (*dalīl sharʿī*) to establish the truth of religious teaching. As understood by Averroes, they display a simple structure involving a few intuitive, self-evident premises and leading to certain knowledge, while also displaying some similarity to the patterns of demonstration that are employed by philosophers. In their construction, the Lawgiver proves to be not only an insightful pedagogue but also a fine logician. His logic is multilayered. On the one hand the Qurʾān includes simple declarations of dogma and sets forth immediate or self-evident knowledge (*ʿilm ḍarūrī*) with various degrees of detail.³⁰ On the other are dogmatic formulations that are not immediately evident. For the latter, a number of additional Qurʾānic verses are supplied, mainly in form of arguments from induction (*istiqrāʾ*), to provide auxiliary evidence toward their correct understanding.

In addition to scriptural arguments there are articles of faith proper. Averroes classifies them by genus or category (*jins, fann*) and supplies their

²⁷ Cf. Averroes 1994a: 101–8.

²⁸ Hence the use of *aẓhar* (“more apparent”) as a comparative of *ẓāhir*, for instance, at *Exposition* 148.

²⁹ *Exposition* 133–34. ³⁰ *Ibid.*, 169.

complete enumeration.³¹ These articles shape the structure of the *Exposition*, which is largely modeled on that of conventional *kalām* treatises such as the three that are mentioned by Averroes: Juwaynī's *Guide* (*Irshād*), his *Nizamian Creed* (*al-'Aqīda al-Niẓāmiyya*), and Ghazālī's *Moderation in Belief* (*al-Iqtisād fī l-i'tiqād*).³² Conspicuous by their absence in the *Exposition* are the two sections on epistemology (*ahkām al-naẓar wa-l-'ilm*) and on the imamate (*al-imāma*) that are usually placed, respectively, at the beginning and at the end of *kalām* treatises. The epistemology section was clearly viewed by Averroes as comparatively unimportant vis-à-vis philosophical logic, and for this reason it was left out to give prominence to scriptural exegesis. The section on the imamate was omitted in keeping with Sunni doctrine, which did not include it among the principles of religion.³³ As he analyzes each article of faith, Averroes always discusses the following points: the content of dogmas as found in the Holy Book and in accord with its *ẓāhir*, the scriptural arguments that underpin it, attendant questions that may arise, and the refutation of misconceptions disseminated in classical *kalām*. Averroes' own positive elaboration of the religious principles is examined in the following, and the negative or polemical thread of his critique is taken up below in the section on "The Criticism of Islamic Theology."

*God's existence (wujūd Allāh).*³⁴ On this prominent topic of theological debate Averroes argues that the knowledge of God's existence is the principal obligation for every individual who is subject to the divine Law (*mukallaḥ*).³⁵ The argument for God's existence found in the Qur'ān revolves around the two tenets of creation (*ikhṭirā*) and providence (*'ināya*), which is essentially the belief that creation is for the good of man.³⁶ In this sense the argument from providence relates to that from creation, while also relating to a further argument that is centered on the world's temporal origination (see later). All these arguments result from self-evident premises (*aṣl*), such as the premise that the heavens serve – that is, obey the divine command – to sustain earthly life (*tashkīr*), a point

³¹ Ibid., 168, 191.

³² Ibid., 144, 188–89, 225. Cf. Gardet and Anawati 1970: 156–60; Geoffroy 1999: 25–28.

³³ Some discussion over the government of the community can be found in Averroes' commentary on Plato's *Republic*, which belongs, however, to his philosophical rather than religious reflection. The absence of a parallel discussion in the *Exposition* can perhaps be regarded as Averroes' endorsement of the Fārābīan view that politics includes religion rather than being included in it. This view is the reverse of the mainstream position in early Sunnism, which had its discussion of religion include that of the imamate until al-Ash'arī, when the imamate ceased to be seen as a principle of religion.

³⁴ *Exposition* 132–54. Cf. Geoffroy 1999: 28–40.

³⁵ *Decisive Treatise*, at Averroes 1972b: 64.

³⁶ *Exposition* 153–54.

that will play a key role in the later discussion of God's decree and predetermination.

*God's unicity (waḥdaniyya).*³⁷ Stated in Qur'ān 47:19 ("There is no god but God"³⁸), the profession of God's unicity (*kalimat al-tawḥīd*) comprises a negative claim ("there is no god") and an affirmative one ("but God"), with the latter founded on the prior verification of God's existence. Averroes brings out the scriptural arguments in favor of both the negative and the positive claims and expounds them in the way that the Qur'ān (21:22, 23:91, 17:42) explicitly mentions (*naṣṣa*), laying out their import and argumentative structure.

*God's attributes (ṣifāt).*³⁹ The seven attributes featuring in the Qur'ān (i.e., knowledge, life, will, power, speech, hearing, and sight) are rationally verified by Averroes through the so-called inference from the seen to the unseen (*qiyās al-ghā'ib 'alā l-shāhid*). This is a typical theological argument where the existence of a given attribute in God (*qiyās al-ghā'ib*) is concluded from its existence in man (*'alā l-shāhid*), and assumes as a necessary condition (*shart*) for its validity that the inference is grounded in an objective connection between the two terms of comparison. On this premise, all the attributes that can be established for God are derived from their existence in man, with the obvious proviso that they are found in God to a higher degree of perfection.⁴⁰ Particularly the attribute of knowledge proves key to the establishment of all others. The Holy Book is explicit in affirming knowledge (67:14) but provides no argument. Averroes sets out to supplement that which is not expressly provided. His analysis of divine knowledge revolves around the notion of providence, showing that purposeful (i.e., providential) action presupposes knowledge of that which is produced. It must be affirmed that knowledge is eternal, but further speculation as to the features of this eternal knowledge, such as attempted in *kalām*, is best avoided. The attribute of life is implied in knowledge, which entails also hearing and sight to the extent that God's knowledge encompasses whatever can be perceived in creation. Will and power are likewise implied by God's knowledge, as is evident from the fact that divine knowledge results in deliberate and efficacious action. The conjunction of power and knowledge, finally, translates into divine speech (*kalām*), which is nothing but the emanation of knowledge from a

³⁷ Ibid., 155–59.

³⁸ English translations of the Qur'ān are from *The Qur'ān: A New Translation by M. A. S. Abdel Haleem* (New York: Oxford University Press, 2005).

³⁹ *Exposition* 160–67. ⁴⁰ Ibid., 169.

powerful agent. Realized by humans through the intermediary of utterance (*lafẓ*), divine speech is expressed by any of the mediums that are mentioned by the Qurʾān (42:51): the sending of an angel, inspiration, and inner locution – to which Averroes adds demonstrative reasoning as a prerogative of philosophers (163). The issue relates in an obvious way to the vexed question in Islamic theology as to whether the Qurʾān, being God’s speech (*kalām Allāh*), is eternal or created. In Averroes’ solution it is eternal, whereas the words (*lafẓ*) by which it is articulated are created by God, and those written on the paper of physical books are the work of humans.

*God’s transcendence (tanzīh).*⁴¹ God’s transcendence is stated in Qurʾān 42:11 (“There is nothing like Him: He is the All Hearing, the All Seeing”) and evidence for it is provided in 16:17 (“Can He who creates be compared to one who cannot create?”). The creative power of God sets Him apart from all nature, and if God sustains being in existence unfailingly (2:255, 35:41), He must be free from all attributes implying imperfection such as mortality or sleep (25:58, 2:255, 20:52). Transcendence raises questions as to the possibility of corporeality (*jismiyya*), location (*jīha*), and visibility (*ruʾya*) for God, which are asserted in Scripture and are so inextricably intertwined that to deny any of them, as Muʿtazilites did for corporeality, leads to denying the others.⁴² All of them, on Averroes’ account, constitute unambiguous characterizations of God in the sacred text and are necessary components of the faith and piety of common believers. It is true that the corporeality of God is not quite stated by the Lawgiver, which simply means that scriptural silence enjoins similar silence on clerics in their teachings to the community. The community, however, needs a physical representation of God, and Scripture fulfills this need with the famous analogy (*mithāl*) of God as light (24:35). This powerful image not only captures some of God’s real nature; it also has the advantage of supporting the attendant belief that God is an object of vision in the hereafter. This belief is explicitly stated in the Qurʾān and should not be a subject of public discussion, even though it is clear to philosophers that “having vision of God” is mere figurative language for “having full knowledge (*mazīd ʿilm*) of Him.” Also God’s location, or “direction,” is explicitly given in Scripture (Qurʾān 69:17, 32:5, 70:4, 67:16).⁴³ Indeed, the notion that God is located in the heavens is so central that it can only be accepted without further elaboration on its actual meaning. After all this teaching is rationally defensible,⁴⁴ and construing it as inherently

⁴¹ Ibid., 168–91.

⁴² Ibid., 176–77, 185.

⁴³ Ibid., 176.

⁴⁴ Ibid., 178.

ambiguous or in need of interpretation would be tantamount to taking virtually all religion to be ambiguous and interpretable.

*God's acts (af'āl).*⁴⁵ The *Exposition* discusses God's action in successive sections dedicated to the world's temporal origination (*ḥudūth al-'ālam*), the sending of prophets (*ba'ih al-rusul*), God's decree and predetermination (*al-qadā' wa-l-qadar*), divine justice or injustice (*al-jawr wa-l-'adal*), and the afterlife (*al-ma'ād*). The first centers on the teaching that the world is brought about by God and cannot exist by chance or spontaneous generation.⁴⁶ This is indicated in the Qur'ān (78:6–16) through the same argument that infers the existence of a Maker from the consideration of providence or teleology in nature.⁴⁷ The argument is constructed in a way that is easy for the majority of believers to grasp: it suggests a temporal origination for the world out of a pre-existing substrate (11:7, 41:11) and it makes use of various images taken from everyday experience.⁴⁸

The second aspect of God's activity, the sending of prophets, involves greater complexity.⁴⁹ The discussion of prophecy comprises at least two lines of inquiry: one concerns the metaphysical possibility of prophecy as such, the other its realization in a particular individual as well as the methods available to verify it. It is this second question that gains prominence in Averroes. He begins by assuming that the veracity of a prophet is demonstrated by a miracle, defined as a prodigious action that can be explained only as a supernatural operation that is divinely sanctioned. Averroes is careful to distinguish between different kinds of miracles answering to different kinds of actions. Only actions that are specific to prophets can validly testify to the veracity of prophecy, provided that their prodigious character is ascertained. For not every action is specific to prophets, just as not every action is specific to a doctor, only the action of healing. Specific to prophets is the laying down of appropriate laws to regulate human cohabitation in accord with the divine will. That is what Muḥammad endeavored to do in the Qur'ān, so that Muḥammad's veracity is verified by the prodigious character of the Qur'ān itself. As a proof of this prodigiousness Averroes invokes its inimitability (*i'jāz*) as a manifestation of the superhuman wisdom that lays down injunctions

⁴⁵ Ibid., 192–247. ⁴⁶ Ibid., 193–207; *Decisive Treatise*, at Averroes 1972b: 42–43.

⁴⁷ *Exposition* 150–51, 193–98. Against the thesis of chance or spontaneity Averroes stresses the teleological orientation of nature's operations. In this vein he reiterates the argument from providence by invoking pertinent Qur'ānic texts (e.g. 78: 6–16) in their literal meaning, consistently with the overall approach of his *Exposition*.

⁴⁸ *Exposition* 205; *Decisive Treatise*, at Averroes 1972b: 40–43.

⁴⁹ *Exposition* 208–22; cf. Arfa-Mensia 1999: 222–40.

regarding human knowledge and action, commands so perfect that they could not have been devised by humankind.

Further difficult questions are raised by the action of God's decreeing all that comes to pass, which seems to suggest determinism.⁵⁰ This too was a thorny issue among theologians⁵¹ and a source of division within the Muslim community. In one camp, the outright determinists known as the Jabriyya subscribed to this doctrine unreservedly. In the other, theologians of the Mu'tazilite school defended human freedom of will against all attempts to declare it overridden by God's decree. Faced with this conflict, Averroes advocates a middle way (*tawassuṭ*) that, to his mind, expresses the manifest intention of religious Law: not to oppose (*tafrīq*) but to reconcile (*jam*) the extremes. On reflection, every human person acts in consequence of causes that lie partly outside and partly inside his or her soul, thus responding to external factors as much as internal drives. In a sense, therefore, human actions are really dependent on human drives or powers and are, as such, under the control of human agents. At the same time all external and internal causes, as much as their effects, are known to God and cannot escape His control. As Averroes remarks, God's knowledge is productive of that which He knows,⁵² and it is clear that His knowledge extends to all powers and all actions without exception, to both that which is hidden (*ghayb*) and that which is manifest: "He has the keys to the unseen: no one knows them but Him" (6:59, 27:65).⁵³

A similar conflict concerns the question of God's justice.⁵⁴ Here the opposition seems to stem from the Qur'ān itself: alongside verses that affirm God's justice (3:18, 41:46, 4:40), others (13:27) state that God inclines some of His subjects toward error (*iḍlāl*) in what appears as arbitrary and unfair behavior. Averroes' approach consists once again in

⁵⁰ *Exposition* 223–33.

⁵¹ The difficulty arises, as noticed by Averroes, from the conflict between Qur'ānic pronouncements that teach predetermination (e.g. 54: 49, 13: 8) and others that seem to oppose it (e.g. 42: 30–34; 10: 27; 2: 286), not to mention those texts where the contradiction would be within the same verse (e.g. 3: 165). The same holds for the sayings of the Prophet.

⁵² The subject is explored in Averroes' *Appendix* (Averroes 1972b).

⁵³ Confronted with the teaching that God is the only real agent (*lā fā'il illā llāh*), which seems to negate all efficacy for human powers, Averroes responds that such efficacy can still be acknowledged for the production of everything that is classifiable as an accident, whereas the production of substances requires God's causation: "the sperm derives from the woman or the menstrual blood heat only; but the creation of the fetus and its soul, which is life itself, comes from God Almighty" (Averroes 2001c: 113). Therefore, inasmuch as substances alone are true and proper instances of being, it can be said that for all that is truly being, the cause and agent – or, more appropriately, the "creator" (*khāliq*, at *Exposition* 232) – is God himself.

⁵⁴ *Exposition* 234–39.

harmonizing (*jam'*) the conflicting evidence, which he does in this case by explaining away injustice through rational interpretation (*ta'wīl*). Evil is certainly permitted, in absolute terms, but is nonetheless relativized or subordinated to God's providential design for the overall working of nature. It is therefore allowed as an instrument in the economy of God's justice and His care for the good of creation. This is not to deny the reality of objective moral values. On the contrary, that which is good merely on account of some external, intended good does remain evil in itself, essentially and per se. The error of theologians, especially the Ash'arites, consists in abandoning ethical objectivism by interpreting God's justice to mean that, since nothing that God wills is evil, nothing that exists through Him is evil either. In this way all moral evaluations become absurdly nominalistic, lacking objective reality and rational transparency.

On the topic of the afterlife,⁵⁵ Averroes observes the agreement of all religions (and of reason itself) as to its existence and basic characteristics (*ṣifāt wujūdihi*). But he also remarks that the imagery (*tamthīl*) that religions deploy differ greatly. Their variance is due to the abyss that separates the visible world from the invisible and the limited, partial perspectives that are afforded to individual prophets in their efforts to describe life after death. Each prophet has offered images that he deemed appropriate to convey the reality of the hereafter in human language. Differences in their choices have resulted in further differences as concerns doctrinal questions, such as whether human bodies or only disembodied souls can survive after death. Of all options that are set forth by historical religions, Islam provides the best representation of the afterlife, the most effective in arousing human desire for it. Admittedly, different sects in Islam uphold different views on matters of detail: some take the afterlife to be just like earthly life, except that it is endless; others take it to be purely spiritual; others still take it as something corporeal, but of a peculiar kind of corporeality. Yet what matters most is that every religious believer should adhere to the specific doctrine that each is offered, and all doctrines concur on affirming the immortality of soul.⁵⁶

The Criticism of Islamic Theology

Averroes' appraisal of traditional theology is, predictably, very unfavorable. The teachings of Islamic Law in both outward meaning (*ẓāhir*) and

⁵⁵ Ibid., 240–47; *Decisive Treatise*, at Averroes 1972b: 49–51.

⁵⁶ Averroes (*Exposition* 245) does not exclude that the souls may at death transmigrate into bodies other than those inhabited here below.

ultimate purpose have escaped all *kalām* without exception. This comprises the two theological schools of Ash‘arism and Mu‘tazilism, as well as the Literalists known as *Hashwiyya* and the Sufis called *Bāṭiniyya*. Literalists err in portraying tradition (*sam‘*) as the only way of knowing God to the exclusion of reason, even though rational endeavor is clearly encouraged by the Qur’ān.⁵⁷ Meanwhile the Sufis insist on ascetic effort as the exclusive means to nurture religious piety, as if rational understanding had no role to play. Averroes rather agrees with theologians of both Ash‘arite and Mu‘tazilite affiliations that reason is essential in religion, but he disagrees with them as to what “reason” means. While they take it to consist in theological argumentation, Averroes sees theology by and large as a congeries of speculative claims with no grip on either sound logic or Scripture itself. His attitude was not unusual among philosophers: from his predecessors Averroes derives a conception of theology as relying on modes of argumentation that range from dialectical to rhetorical, or even sophistical,⁵⁸ falling quite short of the heuristic capacity (*quwwa*)⁵⁹ and solidity (*yaqīn*) that true demonstration exhibits in philosophy (*ṣinā‘at al-burhān*).

It must be noted at this point that Averroes’ knowledge of *kalām* is somewhat uneven. By his own admission Mu‘tazilite writings were unavailable in Andalusia.⁶⁰ He knew of Mu‘tazilism only indirectly, through the reports that were found in Ash‘arite sources, whereas his information regarding Ash‘arism is profound, detailed, and precise. He knows not only their distinctive claims but also their argumentation and the assumptions underlying their teachings. He is even aware of the history of theological controversies and the turning points marked by major figures such as al-Juwaynī (d. 1085).⁶¹ On this basis Averroes is able to articulate a reasoned assessment of the different views adopted by different thinkers.⁶² His critique is subtle and thorough, most notably in his discussion of the Mu‘tazilite thesis that that which is nonexistent is a thing (*shay’iyyat al-ma’dūm*).⁶³

Somewhat less severe toward Mu‘tazilites, whose arguments he deems more solid than Ash‘arites’,⁶⁴ Averroes’ opinion is generally critical of

⁵⁷ *Exposition* 149.

⁵⁸ In this respect Averroes lines up with Avicenna (1984a: 101–3), who denied the utility of *kalām*, contrary to al-Fārābī (1948: 107–8), who recognized its function in defending the ideas presented and the actions recommended by the Lawgiver before the large public.

⁵⁹ *Exposition* 138. ⁶⁰ *Ibid.*, 149.

⁶¹ For the relationship between Averroes and al-Juwaynī, see Arfa-Mensia 2012.

⁶² *Exposition* 163–64. ⁶³ *Ibid.*, 139. ⁶⁴ *Decisive Treatise*, at Averroes 1972b: 57.

theological debates (*ṣināʿat al-kalām*). These fail on the side of both logical soundness and doctrinal accuracy. They are of no avail to either common believers or the learned.⁶⁵ They prove worthless in properly religious⁶⁶ as well as rational terms, that is to say, for the exposition of religion as much as the construction of philosophy. Each of these objectives is equally important, and neither is achieved in *kalām*. On the side of religion, the arguments set forth by Ashʿarites fail to capture the explicit meaning (*ẓāhir*) of Scripture: they effectively discredit religious dogma as formulated and replace it with arbitrary innovations constituting sheer heresy. At the same time, they contravene religion by raising numerous questions that were purposely omitted in the Qurʾān. On the side of rational analysis, the typical mode of theologians for dealing with inferences from the visible world to the divine (*qiyās al-ghāʾib ʿalā l-shāhid*),⁶⁷ which establishes immediate analogies between the two realms, is problematic. As we have already seen, Averroes himself resorts to it at times. Yet he is clear that this is admissible only when the analogy is certain and its two terms do share some real common feature (*istiwāʾ ʿabīʿat al-shāhid wa-l-ghāʾib*).⁶⁸ For the most part such inferences have nothing more than a rhetorical appeal. Moreover, theological reasonings are unnecessarily complicated and fail to afford certain knowledge. Averroes examines each of them carefully, with an eye to detecting their flaws (*wahan*) and showing that what is presented as demonstrative is not in fact such due to the lack of certain necessary requirements. Most basically their premises are often false, and Averroes takes pains to show where the errors lie,⁶⁹ pointing to the absurdities that are involved (*ilzāmāt*). On occasion he exposes the inconsistency of their teachings by turning against their proponents an argument that they themselves had embraced.⁷⁰

Take for example their attempt to prove the existence of God on the basis of the world's contingency. Here the world is falsely supposed to be constituted by atoms whose arrangement is purely contingent, capable of existing in whatever form is logically conceivable.⁷¹ Similarly, the unicity of God is demonstrated through the counterfactual argument of mutual impediment (*mumānaʿa*): should more than one god exist, the gods' actions would hinder one another, and no created world would result. Equally spurious is the dilemma between the Ashʿarite thesis of God's word, the Qurʾān, as inherent in God Himself – and hence coessential and

⁶⁵ *Exposition* 137. ⁶⁶ *Ibid.*, 135. ⁶⁷ *Ibid.*, 140. Cf. Geoffroy 1999: 40–46.

⁶⁸ *Exposition* 141. ⁶⁹ *Ibid.*, 138–39. ⁷⁰ *Ibid.*, 137.

⁷¹ See Geoffroy 1999: 28–34; Wolfson 1976: 400–2.

coeternal – and the Muʿtazilite view of it as originated in time. Neither claim can be altogether rejected nor altogether accepted.⁷² In general this applies to the extreme views of the Muʿtazilites and Ashʿarites concerning God's attributes, which are outright reduced to God's essence by the former, whereas they are added onto the essence by the latter as entirely distinct entities. Averroes takes a more differentiated approach when it comes to God's incorporeality, since he here identifies three rival theological theories. There is the theory of Muʿtazilites, who assume God to be both incorporeal and invisible; that of the Ashʿarites, who agree that God is incorporeal, but maintain that He can be the object of vision from the blessed in the hereafter; and a third theory of certain Muʿtazilites and later Ashʿarites, who concluded from God's incorporeality that He had a lack of location or "direction." In the same vein, Averroes rejects the Ashʿarite notion that the connections between causes and effects are not natural necessities but are entirely contingent on God's will and His custom.⁷³ Further flaws are detected in the theological arguments concerning prophecy – both its actual reality and the miracles verifying it – and in those regarding the problem of free will and God's predetermination (*al-qaḍāʾ wa-l-qadar*). As with the other topics, the debate turns on a false set of options. It is falsely assumed that one must choose between human freedom and divine omnipotence, by either construing human agents and not God as the agent of our actions or by denying human agency entirely. The Ashʿarites sought to steer a middle course between determinism and the Muʿtazilite defense of free will, positing that actions are created by God but appropriated by humans. Yet they fell into determinism nonetheless, as they considered appropriation (*kasb*) itself to be a creation of God. Their utmost absurdity is reached in the discussion of divine justice, where they conclude that God cannot be qualified as either just or unjust. In fact, not even humans could be so described on their view, at least not by rational analysis but only on the basis of their compliance with God's arbitrary commands.⁷⁴

⁷² *Exposition* 162–64. ⁷³ *Ibid.*, 211–14.

⁷⁴ It is not clear whether Averroes' discussion improves on what we find in *kalām*. His solution to the problem of free will, for example, has all the appearance of a sophistical argument for determinism. A topic worthy of further investigation is the connection between Averroes' positions and those developed by al-Juwaynī on various issues, whether common to both *kalām* and philosophy, or specific to *kalām* and taken up by philosophy (e.g. God's oneness, His word and providence, the freedom of the will, and the resurrection of the body). For a case of agreement between Averroes and al-Juwaynī, see *Exposition* 158.

Philosophy and the Principles of Religion

The science of theology is founded on the assumption that religion is inherently rational. This conviction naturally resonates with Averroes' rationalism except that for Averroes religion intersects not merely with reason but specifically with *philosophical* reason. The doctrines of philosophy underlie all religious discourse even when the latter is articulated according to its outward meaning (*ẓāhir*) – as it is indeed by Averroes, in an echo of Almohad ideology and its penchant for *Zāhirism*.⁷⁵ The motivations for Averroes' approach are not merely theoretical, whether theological or philosophical. They are rooted in the historical context of Andalusia, dominated by a social and ideological conflict that Averroes, renowned judge and jurist that he was, set out to adjudicate. He was faced by a conflict that, as a result of al-Ghazālī's unwelcome intervention,⁷⁶ set partisans of religion and supporters of philosophy in opposition. It is against this background that Averroes determined to compose his *Decisive Treatise* and his *Exposition*, which he wrote in rapid succession and as complementary to one another. The two writings aim at clearing away the misunderstanding that religion and philosophy are opposed, with the *Decisive Treatise* showing that philosophy is in agreement (*muwāfaqa*) with religion⁷⁷ and the *Exposition*, conversely, arguing that the true teachings of religion conform to those of philosophy, despite claims to the contrary by members of religious sects who have been misled by incorrect interpretations.

The theory of an essential harmony between religion and philosophy rests on Averroes' philosophy of religion and has many ramifications into metaphysics, anthropology, psychology, politics, logic, and epistemology. Averroes identifies as its chief principle (*aṣl al-uṣūl*) that the God of Heaven sent down a revelation through angels and prophets. He takes this to be an effective condition of possibility for all religions, one that is not merely a principle established by religion itself but is dictated by the necessity of rational thinking.⁷⁸ It is what underlies the establishment of positive religions, the knowledge of which (*ma'rifa waḍ' al-ṣarā'i*) is part of philosophy, since it is the philosopher who explores the indispensable function and value of religion for humankind.⁷⁹ Religion bridges the gap

⁷⁵ For the relationship between Averroes and Almohad theology, see Urvoy 1978 and 1998; Geoffroy 1999 and Matteo Di Giovanni's chapter in this volume.

⁷⁶ *Exposition* 183; *Decisive Treatise*, at Averroes 1972b: 52.

⁷⁷ *Exposition* 184–85; *Decisive Treatise*, at Averroes 1972b: 44–53.

⁷⁸ *Exposition* 172, 176, 178.

⁷⁹ *Ibid.*, 218–19.

between the visible (*shāhid*) and the invisible (*ghā'ib*) by means of symbols that come from the former and allude to the latter, with due warning that this procedure yields only approximations. In this way religion is configured as a system of allusions to the reality of the higher world, which is signified symbolically in revelation and explored systematically in philosophy. If philosophers are concerned with the inner meaning of religion, its outer shell is constituted by the external meanings that are subject to philosophical interpretation. These two levels of religious discourse semantics are laid out in the *Decisive Treatise*, a task preparatory to the project of the *Exposition*,⁸⁰ where Averroes aims at clarifying, specifically, the external meaning of dogmas and the ends that are pursued by the Lawgiver.⁸¹ In this sense the *Exposition* is restricted to the *ẓāhir* of religion. This form of *ẓāhirism* is not only consistent in principle with adherence to philosophy but was practiced as a matter of fact by philosophers prior to Averroes: Avicenna, for example, in his work on the afterlife (*al-Adḥawiyya fī l-ma'ād*) defends the view that religion has an external dimension that is designed for the many.⁸² Working from this same assumption Averroes interprets the dogmas of revelation (God's existence and His unicity, His attributes, His predetermination of worldly affairs, and the creation of the world) through doctrines of philosophy bearing on nature, generation, causality, and providence, among other issues. Through philosophy Averroes not only resolves vexed problems of theology but also develops his original interpretation of the sacred text.

If the notion of philosophy as the subtext of religion is a clear and firm tenet in Averroes, one wonders, however, how effectively the harmonization of the two is achieved in the *Exposition*. The case is relatively unproblematic for those dogmas where religious instruction does not contradict philosophical inquiry. Such is the case, for example, with the issue of God's location or direction: quite controversial within the theological debate, the subject lends itself to straightforward treatment with the tools of metaphysics and philosophical cosmology. In other cases the assumed harmony is less obvious, for instance when religious Law explicitly states (*ṣarraḥa*) that God possesses hands and a face.⁸³ In some instances the Law openly contradicts philosophy. These are the only cases in which interpreting the *ẓāhir* is permissible, and even here it is required

⁸⁰ Ibid., 132–33. ⁸¹ The project is first announced at *Decisive Treatise*, at Averroes 1972b: 65–66.

⁸² Avicenna 1984a: 97–102. The essential elements of this conception go back to al-Fārābī's theory of belief in the religious community, which Averroes echoes even in his language. Cf. al-Fārābī 1964: 1.

⁸³ *Exposition* 170–71.

that the interpretation is corroborated by the *ẓāhir* of other scriptural texts in order to be considered as valid.⁸⁴ With this proviso, philosophical hermeneutic is fully allowed in religious exegesis and is indeed advocated as the ultimate resource in resolving all contradiction between opposing “apparent” meanings (*ẓawābir muta‘arīḍa*).

Concluding Remarks

It has been argued that Averroes adopts a literalist approach to religion as he foregrounds the literal meaning (*ẓāhir*) of Scripture vis-à-vis its theological interpretations. His approach constitutes what we have called Averroes’ *ẓāhirism*: literal meanings are to be accepted unquestioningly by the many, while an elite may elucidate them through philosophical analysis, providing the ultimate semantics for religious language itself. This is a point of difference between Averroes’ methodology and that of experts in Islamic theology. The latter – including Ash‘arites themselves – take rational investigation to be available to every individual rather than a restricted group of specially educated professionals. Averroes, by contrast, maintains that philosophical reflection is in principle open to everyone, but he is clear that the full exercise of rationality is in practice the prerogative of a body of trained scholars and exceeds the intellectual capacities of common believers.

If this separates Averroes from scholars of theology, a similar contrast sets him apart from other jurists. The connection with jurisprudence is made by Averroes in a passage from his *Incoherence of the Incoherence* where he compares dogmatic and legal *ẓāhirism*: the former concerns the formulation of religious doctrines, the latter that of legal prescriptions.⁸⁵ The former values rational inference, while the latter denies all validity to analogical reasoning (*qiyās*) inferring unstated injunctions from those that are laid down in the Qur’ān. In Averroes’ version, dogmatic *ẓāhirism* assumes the religious Law to be fully rational (*ḥikmī*) and consistent with the underlying logic of nature, which is transparent to human understanding.⁸⁶ Here is where Averroes departs most visibly from juridical *ẓāhirism*, which is notoriously reluctant to compare divine wisdom and human rationality, or to interpret God’s dispositions by human rational categories. Simply substituting the divine order for the mundane, it refuses to bridge the two as is done by most schools of theology and by jurisprudence itself.

⁸⁴ *Decisive Treatise*, at Averroes 1972b: 32–33.

⁸⁵ *Incoherence of the Incoherence* 429. Cf. Arfa-Mensia 2011.

⁸⁶ *Exposition* 202.

If anything, Ash'arite theology resembles this kind of legal *zāhirism* more than Averroes' thought does. In its occasionalist metaphysics, Ash'arism professes that the organization of the cosmos rests not so much on stable natures or any necessary connections between them but on an infinity of possible configurations and merely contingent relations. Everything is the product of God's sovereign and unfettered will, independent of all metaphysical or ethical constraints. Averroes once again marks a sharp contrast here insofar as he situates God's intervention within the perimeter set by natural philosophy. God is responsible for the creation of beings, yet their origination is explained through the Aristotelian theory of change, both for substance and for the other categories of being. Thus for Averroes, divine action consists in triggering the generation of substance and in preserving it from corruption, whereas the emergence of accidental being is the result of casual processes that accompany the cosmic motion directed, sustained, and ordered by God.

In the end it appears that historical *zāhirism* is something that Averroes, ironically, rejects as tantamount to literalism of a crass and uncritical kind (*hashwiyya*). For historical *zāhirism* presented itself as a universally valid approach, making no room for the elite of rationalist thinkers whom Averroes identifies as the supreme bestowal entrusted by God to mankind.⁸⁷

⁸⁷ *Decisive Treatise*, at Averroes 1972b: 62.

*Averroes on Juridical Reasoning***Ziad Bou Akl*

At the very beginning of the *Decisive Treatise*, Averroes addresses the question of legal analogy (*qiyās sharʿī*) in a passage where he defends, more broadly, the act of reflexion (*iʿtibār*). In order to show that *iʿtibār*, and thus logic, is legally obligatory, he recalls the importance of legal analogy to the main schools of law and opposes their position on this issue with that of the *hashwiyya*, those narrow-minded literalists whom he does not even deign to refute. This strategic move allows him to put logic and philosophy on the side of the majority of Muslims. Since they all defend the use of *qiyās* in legal reasoning, they are bound to accept its theoretical version. Historically, the position of the *hashwiyya* corresponds with that of some anti-analogists who bluntly reject the use of reason in law and theology. Nevertheless, the camp of anti-analogists in the legal tradition is far from being uniform, and legal analogy was not challenged only by those who were suspicious of reason in general. For instance, a theologian like al-Nazzām, who deems *qiyās* central in theology, rejects analogy when applied to the Law because it lacks the precision needed to reach certainty. For him legal questions, unlike rational matters, involve inconsistencies and arbitrariness that analogical reasoning cannot properly grasp. Likewise, for Ibn Ḥazm, the representative of the *Zāhirī* school in Andalusia, the conclusions made from the legal texts should be certain and thus *qiyās* has no place in the Law.¹ In fact, the presumptive (*ẓannī*) nature of the conclusions of analogy raises an epistemic problem that needs to be resolved by all its defenders, especially given that this legal procedure represents one of the most productive sources of new legal judgments and cannot be overlooked.² According to al-Ghazālī, for instance, this

* I thank Krystel Skaff Antoni for her careful editing of the English.

¹ For an overview of the arguments, see Zysow 2013: 163–91. For Ibn Ḥazm in particular, see Arnaldez 1956: 165–75.

² Zysow 2013: 161.

uncertainty is not an issue, since the obligation to apply the conclusions of a *qiyās*, regardless of its epistemic strength, is known with certainty. Averroes, who roughly shares this idea with al-Ghazālī, focuses in his legal writings on a different aspect of the same problem. He seeks to determine the exact nature of the operation labeled by the legal tradition as *qiyās*. In other words, among all the exegetical operations that aim to extract legal status and apply it to new cases unmentioned in the sources, which one should specifically be labeled as *qiyās*? Moreover, can we really speak of *qiyās* in the legal field in the first place? The cognitive boundaries of this operation and the contrast between analogy and mere interpretation are questions that Averroes inherited from the legal tradition. Yet his approach to the relevance of the term *qiyās* in a legal context is that of a philosopher, who has in mind the homonymy of this term, also used to translate the Greek *sylogismos*.³

Averroes first addresses this question in his early treatise on legal theory, his *Abridgement* of al-Ghazālī's *Mustasfā*. Later, he raises it again in the short introduction to his legal summa, the *Jurist's Primer*. At first glance, one might be tempted to think that there is an evolution in his thought toward an acceptance of *qiyās* in law: while this procedure seems to have no place in the *Abridgement* where he claims that exegetical operations are linguistic and do not involve this type of inferences, he nevertheless seems to finally admit it in the *Jurist's Primer* and in the *Decisive Treatise*. This is the position defended by Jamal al-Din al-Alawi, the first editor of the *Abridgement*, and by Arfa Mensia in an article on this subject.⁴ I do not think, though, that the position of Averroes has changed substantially throughout his career. In the first section of this chapter, I will try to show that the distinction drawn by Averroes between what is specifically a *qiyās* in the legal field and what the jurists mistakenly take to be one is certainly more explicit in the *Jurist's Primer*, but already exists in a rather elliptical passage of the *Abridgement*. Averroes seems to present this subtle distinction that “misled a number of jurists” as his own contribution to the *qiyās* problem. According to him, it allows a resolution of the opposition between the pro-analogists and the *Zāhirīs*, or “Literalists,” who reject this type of reasoning and claim to follow only the literal meaning (*ẓāhir*) of the texts. In the second section of the chapter, I will trace its origin back to

³ For al-Fārābī the theological and juridical use of the technical term *qiyās* in the sense of analogy is due to the fact that, in its popular sense, the term suggests the idea of comparison (*muqāyasa*) between two measures. See al-Fārābī, *Khaṭāba*: 83.16–19 in al-Fārābī 1971.

⁴ Averroes 1994a: 124–25. But see p. 131, where al-Alawi mentions the parallel with the abovementioned section of the *Jurist's Primer*. See Arfa-Mensia 2011: 457–70.

al-Fārābī's discussion of legal analogies. In his *Logic According to the Method of the Mutakallimūn*, the Second Master presents a classification of legal inferences that inspired Averroes' peculiar restriction of the scope of *qiyās fiqhī* to what al-Fārābī presents as the equivalent of the Aristotelian *exemplum*.

The Cognitive Nature of Legal Operations

The nature of the mental operation involved in the interpretation of a legal text is a widely debated question among *uṣūlī* scholars, who assign great significance to epistemological questions. The problem can be framed as follows: when the jurists extend the legal status of what is explicitly mentioned by the texts to a new case that does not directly fall under the scope of the command, are they always proceeding through *qiyās* or does such inferential reasoning represent only one procedure among others? The answer to this question lies in the way an expression indicates its legal status. The chapter on *qiyās* in the *Mustasfā* of al-Ghazālī is part of a greater section devoted to the interpretation of linguistic expressions.⁵ According to al-Ghazālī, an expression indicates a legal status by its (a) form and composition (*bi-ṣiḡhatihi wa-manẓūmihi*), (b) what it implies and what one understands from it (*bi-fahwāhu wa-mafhūmihi*), and (c) its meaning and what one rationally grasps from it (*bi-ma'nāhu wa-ma'qūlihi*).⁶ The first two types of indication are fulfilled through a process of linguistic interpretation. This process shows the intention of the speaker implied by the sentence behind the wording of the text. This is for example the case of metaphors where certain contextual indicators (*qar-ā'in*) allow the listener to grasp the intended meaning. It is also the case of specific expressions that intend a more general meaning. For example, as Averroes says in the *Jurist's Primer*, from the Qur'ānic interdiction against eating *khinzīr* (pork), the jurists forbid also the consumption of wild boar (*khinzīr barrī*), without calling this operation an analogy. In this case, the species of wild boar is implied in the wording of the sentence. On the other hand, the third way of indication mentioned by al-Ghazālī requires for its fulfillment the intervention of the operation called *qiyās*. As is the case in the mainstream juridical tradition, the term *qiyās* is understood in a loose sense that corresponds only partially to strict analogy and

⁵ Al-Ghazālī, *al-Mustasfā*, II.7–378.

⁶ Al-Ghazālī, *al-Mustasfā*, II.7.12–14.

encompasses other types of legal reasoning.⁷ A classical example of *qiyās* is the extension of the prohibition of *khamr* (date wine) to other alcoholic beverages. This prohibition does not take place immediately, without an inferential reasoning that leads to the conclusion. At the core of this reasoning is the cause or *ratio legis* (*illa*) that allows the extension of the legal status (*ḥukm*) from the original case (*aṣl*) mentioned in the wording of the text to the novel case (*far'*) under examination. Key to the process is the establishment or verification of the cause (*ta'īl*), which is, in the case of date wine, inebriation.

The first two types of indication rest on the linguistic competence of the listener. The form of an expression (*ṣīgha*) or what is understood from it (*mafhūm*) refers to what is, respectively, either stated or implied by a text and can be deciphered according to the communicative rules of the language. For example, when the whole is indicated by one of its parts or vice-versa, grasping the meaning intended by the speaker in substituting the whole for the part certainly goes beyond the semantic layer of understanding. Yet this still falls within the comprehension of the sentence by listeners who are familiar with what al-Ghazālī calls a “custom of the Arabs” (*‘ādat al-‘arab*), that is, effortlessly making such substitutions. Therefore, neither type involves any rational inference. In contrast, the third type involves such inferences, as indicated by al-Ghazālī’s use of the word *ma‘qūl*, which refers to the object grasped by the action of reasoning (*‘aql*).⁸ In order to reach the *ma‘qūl* indicated by an expression, one should resort to *qiyās*.

It is not always easy to define the boundary between, on the one hand, understanding a command in a figurative or loose way that covers a new case and, on the other hand, extending the command to unprecedented cases by way of an inference involving the verification of a cause. For someone like al-Ghazālī, who perfectly admits the use of *qiyās* in law, this difference is innocuous and devoid of any exegetical repercussions. Even if the fine line between implicit meaning and clear *qiyās* is blurred in some cases, this hesitation is merely theoretical and ultimately will not affect the application of the legal status. Moreover, no matter which type of interpretation one uses to reach a conclusion, the latter is legally valid.⁹

⁷ Hallaq speaks of an “umbrella term” covering a whole range of juridical inferences, beginning with al-Shāfi‘ī, a major jurist who was a key figure in the development of the theory of *qiyās*. See Hallaq 1989: 289.

⁸ See Hallaq 1989: 286–89.

⁹ This is for example the case of the *a fortiori* argument. Hallaq 1989 is devoted to these cases that fall between linguistic and inferential reasoning.

However, when debating with anti-analogists who firmly reject this type of inference in law, the difference between a linguistic understanding of a text and an inferential reasoning becomes crucial for the interpretation, as will become clear in the case of Averroes.

In his *Abridgement*, Averroes greatly reduces the scope of *qiyās*. According to him, the quasi-totality of legal operations consists in an understanding of the implicit intention of the Lawgiver. What most *uṣūlis* like al-Ghazālī conceive as an operation requiring the verification of a cause is, in reality, a comprehension of the real intended meaning of the term in question. Consequently, al-Ghazālī's three types of indication are replaced by two. Expressions indicate either by their form or by their implicit meaning: *mafhūm* and *ma'qūl* are merged in the *Abridgement* within the same category, and the much-debated fine line dividing the two categories disappears, since both operations are in fact of the same nature.¹⁰ This purely linguistic approach to legal reasoning is justified by Averroes as follows:

Since that is the case, and since what they mean by *qiyās* in this art [i.e. legal theory] refers, in the majority of cases, to what the expressions imply according to their implicit meaning (*mafhūmātihā*), and since terms only imply that by contextual indicators connected to them – not any random contextual indicator but those subsumed under a genus deemed as significant by the Law – this situation is similar to that of ordinary discourse. Just as the contextual indicators taken into account by the Arab when he addresses somebody else are known by the listener – and the Arab knows that the listener takes them into account during the address – it should be the same with the Law.¹¹

Legal discourse is compared with ordinary discourse (*al-mukhāṭaba al-jumhūriyya*). In both cases, the listener (or exegete) uses linguistic tools in order to understand the intention of the speaker (or lawgiver), relying on specific contextual indicators (*qarā'in*) within the discourse in order to grasp the implicit meaning. Appealing to a process like extracting the cause to describe this operation is misleading, since the very nature of the cause in the legal field is peculiar: as Averroes has already made clear, the legal status is linked to the original case by virtue of a text containing, in one way or another, the cause that accounts for the status.¹² Unlike natural causes, text-based causes do not call for the extraction of a syllogism, but

¹⁰ *Abridgement* §176: "expression is divided into what indicates the status by its form and what indicates it by its implicit meaning and is understood from it (*bi-maḥmūmihī wa-ma'qūlihī*)."

¹¹ *Abridgement* §261. ¹² *Ibid.*, §259.

instead demand an operation for which Averroes coins the term “substitution (*ibdāl*).” This operation, which corresponds to the stylistic figure of synecdoche (and in most cases restrictive synecdoche), is described as a sort of metaphor (*isti‘āra*). Averroes makes it clear that the two terms can be used interchangeably, since metaphor is basically a substitution of expression, and *ibdāl* is a kind of metaphor.¹³ However, in the legal context, Averroes decides to reserve the term *ibdāl* for the case where something general is substituted for something particular, using the term *isti‘āra* for all other types. This rather arbitrary decision goes against what he states elsewhere.¹⁴ It is dictated by the frequency, in the legal field, of this peculiar type of relation to which a separate section known as *al-‘āmm wa-al-khāṣṣ* is dedicated in the *uṣūlī* literature.¹⁵

Verifying a text-based *‘illa* is thus tantamount to deciphering the metaphorical sense by substituting the general intended meaning for the particular uttered expression. Given the linguistic nature of this operation, Averroes proposes to replace the term *qiyās* by that of *ibdāl*, which more accurately renders the action (*fi‘l*) of this operation:

In short, since it appears that, in the majority of cases where the upholders of *qiyās* in Law use it, they do not do so to discover an unknown status from a known one (as we discover from rational premises an unknown object of investigation) but rather to verify the substitution of expressions in each occurrence and for each case, the species they call suggestive and appropriate *qiyās* or *qiyās* of similitude are, according to them, circumstances indicating a substitution of terms. They are not *qiyās* and do not possess the action of *qiyās*, even if this distinction remains unclear for the experts of this art.¹⁶

In this passage, Averroes abandons the gradual distinction found in al-Ghazālī’s *Mustasfā* between *ṣīgha*, *mafhūm* and *ma‘qūl*, which makes *qiyās* an extreme form of a more general exegetical method: a form in which the inferred meaning is especially remote from the surface meaning of the words being interpreted. For Averroes, the difference between these exegetical operations in which we grasp something on the basis of a verbal expression, on the one hand, and *qiyās*, on the other, lies elsewhere. The real opposition is between discovering an unknown status on the basis of a known one and verifying the substitution of expressions – regardless of how remote the substituted meaning is from the stated one. The former

¹³ Ibid., §197. ¹⁴ For his assimilation of *ibdāl* to metaphor, see *Paraph. Rhetoric* 269.

¹⁵ For an overview of this pair of technical terms, see Lowry, “al-‘Āmm wa-l-khāṣṣ,” *El*3.

¹⁶ *Abridgement* §272.

operation is described as the proper action of *qiyās*. As shown from the description of this operation – “we discover from rational premises (*ma‘qūlāt*) an unknown object of investigation (*maṭlūb*)” – *qiyās* could be taken here in its logical sense of syllogism, since *ma‘qūlāt* and *maṭlūb* are part of the logical vocabulary. The latter operation describes legal reasoning, including what the jurists call sometimes *qiyās*. Both are equated by Averroes to linguistic operations, without any distinction between an exegetical solution to a new problem and an inferential one. Extending a rule to an uncovered case usually means going back to the real intended general term under which this new case falls.

By emphasizing the logical sense of *qiyās*, Averroes is not expressing philosophical snobbery toward non-demonstrative methods; he can now compare logical and legal operations in order to identify the specific characteristics of each. This strictly exegetical perspective on legal reasoning anticipates his analysis of legal interpretation (*ijtihād*), which he sets out at the end of the *Abridgement*. This activity is for Averroes mainly a declarative one, which aims at finding a truth that has always existed in the Lawgiver’s intention, and not, as is the case for al-Ghazālī, a performative activity filling the gaps and the omissions of the Law.¹⁷

However, in the section we are dealing with, this distinction between linguistic substitution used in law and logical syllogism is explicitly oriented toward a resolution of the central problem of *qiyās* in Law, namely the question of its very legitimacy. For Averroes, the conflict between the pro-analogist mainstream schools and the anti-analogist Zāhirīs is mainly a terminological one. If the jurists understood the real nature of these operations they call *qiyās*, they would have been able to refute the attacks of the Zāhirīs by forcing them to admit that the linguistic operation is firmly anchored in the Lawgiver’s intention. In the excerpt subsequent to the abovementioned passage, he continues:

This [confusion between *qiyās* and substitution] appears in the arguments they use to refute the anti-analogists, called by them the upholders of the apparent (*ahl al-zāhir*). For these people used an irrefutable argument

¹⁷ This issue is whether there is one single solution to every juridical question, often posed in the form, “does every interpreter hit the mark (*hal kull mujtahid muṣīb*)?” For a fallibilist like Averroes, there is only one solution for every question, encompassed in the Lawgiver’s intention, which is seen as juridically omniscient. Thus not all interpreters can “hit the mark,” since truth and error exist objectively. For radical infallibilists like al-Ghazālī, there is a region in the law, that of presumption, where contradictory solutions may be true. For this multilayered question of truth and error in Averroes and al-Ghazālī, see my introduction in *Abridgement* (88–106) and Bou Akl 2016. For al-Ghazālī, see Johansen 2013: 133–37. For an overview of the question, see Zysow 2013: 259–76.

against the pro-analogists: intellects cannot affirm or deny anything that is to be known by Revelation and divine command. Moreover, legal statuses are not essential qualities that can be apprehended by intellects. In sum, in all that is established through exegesis (*al-tawqīf*), there is no room for *qiyās* and the only way to know such things is tradition (*al-samʿ*), as is the case for languages and so on.¹⁸

Based on their denial of any nonscriptural connection between a human action and the legal norm corresponding to it (which denial they share with al-Ghazālī himself and Ashʿarites in general), the Zāhirīs can contest al-Ghazālī's argument in favor of the use of *qiyās* in the Law, by highlighting the incommensurability of rational and exegetical methods and the fact that legal statuses are not essential qualities (*ṣifāt dhawāt*) that the intellect can grasp by itself. Rather, they are instituted (*waḍʿiyya*) qualities defined by legal discourse. In other words, how can al-Ghazālī and the Ashʿarites admit the use of reason in discovering a legal cause behind a rule (which is the core of the *qiyās* operation) if one of their main theological creeds is to affirm the incapacity of unaided reason to grasp legal statuses, which are arbitrarily instituted by the will of God?¹⁹ By understanding the real nature of these operations, they will abandon the use of *qiyās* to describe them and compel the anti-analogists to admit these linguistic operations. As for the Zāhirīs, Averroes reiterates in the *Jurist's Primer* that they cannot refuse to apply the operations of substitution, since it makes little sense to limit oneself to the form of expressions without considering their implicit meaning.²⁰

However, this reformulation of legal *qiyās* in terms of linguistic substitution cannot always be applied, as Averroes himself concedes. This is why he adds “for the most part” or “in most cases.”²¹ At the end of the section where he raises the Zāhirī objection to the Ashʿarite use of *qiyās*, he says:

¹⁸ *Abridgement* §272.

¹⁹ Indeed, the ethical relativism championed at the beginning of the *Mustasfā* is at the heart of the legal system of al-Ghazālī, and this objection has been often raised against the Ashʿarites, whose legal system culminates in the identification of five ultimate objectives that the legal rules aim to preserve (religion, life, intellect, progeny, and property). However, according to al-Ghazālī in the *Mustasfā*, these objectives are not grasped by reason but by induction from the Law itself. For this specific polemic and Ashʿarite responses, see Zysow 2013: 201–94. For *maṣlaḥa* in al-Ghazālī, see Opwis 2010: 65–87. For an overview on the metaethics of Ashʿarites, see Shihadeh 2014.

²⁰ *Abridgement* §273. *Jurist's Primer*, at Averroes 2006: l.xlvii. This means that they have to renounce their main exegetical principle. As an example, Ibn Ḥazm refuses to admit a fortiori reasoning, which is, according to Averroes (and to the main jurists), a linguistic operation (Hallaq 1989: 295 n. 28).

²¹ For instance, *fi l-akthar* (*Abridgement* §261), *akthar al-mawāḍiʿ* (§272), *akthar maqāyīs al-sharʿ* (§273).

This objection concerns only those who apply the *qiyās* to an original case whose expression does not contain any notification (*tanbīh*) of the cause of the original case, like the *qiyās* from the punishment for the drinking of wine to that for slandering. As for he who establishes a *qiyās* from an original case containing in its implicit meaning the cause of that original case – even if it does not contain it in the form of the expression – this objection does not concern him. And for the most part *qiyās* in Law is of that sort.²²

There is a minority of operations that the *Zāhirīs* cannot admit because they cannot be converted to the linguistic operation of substitution. Since these involve inferential reasoning performed by jurists, they cannot be anchored in the Lawgiver's intention like linguistic operations. Averroes gives as an example of real *qiyās* the punishment for drinking wine. Since there is no textual indication about the extent of this punishment, the majority, following the Companions of the Prophet, fix it at eighty lashes, by analogy to the slanderer, whereas the *Zāhirīs*, who do not admit *qiyās*, set it at forty lashes, following a tradition.²³ Averroes alludes to this example without giving any further explanation in the *Abridgement* about the difference between the two operations. In the short introduction to the *Jurist's Primer* devoted to legal theory, however, we do find a clarification of this distinction between genuine and merely apparent legal analogy (*qiyās fiqhī*). Averroes begins by announcing that there are four types of expressions (*aṣnāf al-alfāz*) that provide legal status. Three of them are agreed on by everybody (*muttafaq 'alayhā*): (1) the general taken in its generality or the specific in its specificity, (2) the general by which specificity is intended (*yurād bihi l-khuṣūs*), and (3) the specific by which generality is intended. While the first operation is a simple application of a text to a new case, the last two are, according to the *Abridgement*, linguistic substitutions. After a few examples and some linguistic considerations, he begins by defining legal analogy, which corresponds, even if it is not explicitly stated in the text, to the fourth, more problematic type of expression, "the specific by which a specific is intended."²⁴ He then raises the question

²² *Abridgement* §273.

²³ The punishment for slandering (*qadhf*) is fixed to eighty lashes in Qur'an 24: 4–5. See *Abridgement* §224 and Linant de Bellefonds 1974: 389. For the analogy with the punishment of wine drinking, see *Jurist's Primer*, at Averroes 2006: II.534–35. Note that the example given falls under the field of *ḥudūd* (punishments), where, as Averroes says earlier, invoking the authority of Abū Ḥanīfa, the majority of *qiyās* rests on similitude which is less convincing than analogies resting on a common cause. This is why Abū Ḥanīfa forbids the use of *qiyās* in that field (*Abridgement* §268).

²⁴ To be understood as a specific by which *another* specific is intended and not, like the first case, as a specific by which *specificity* is intended, i.e. an unproblematic expression whose intended specific extension corresponds to the uttered one.

of the difference between this operation and what seems to be a legal analogy (the third type), following on from his earlier criticism of this mislabeling, and using the same juridical examples:

The difference between legal *qiyās* and a specific expression by which a more general meaning is intended, is that *qiyās* applies *when there is a specific expression by which a specific meaning is intended*, the ruling for which is then applied to something else. That is, what is not mentioned is equated with what is mentioned because of some similarity between the two, rather than by the indication of the words. [This is so] because to equate a situation for which the ruling is not known with a situation for which the ruling is known by virtue of the notification (*tanbīh*) of a word is not *qiyās* but, rather, comes under the category of the indication of meaning from the words themselves. Those two are very similar to each other since they both involve deriving the ruling for an unknown situation from a known one, and they are very often a cause of confusion for jurists.

Examples of *qiyās* are that a drinker of wine is given the same *ḥadd*-punishment as a slanderer (*qādhif*) or that the minimum amount for a dowry is considered the same as the minimum amount for which the hand may be cut off (as punishment for stealing).²⁵ Considering items that are prohibited to trade usuriously, however, to refer to staple foodstuffs, to those that can be measured, or simply to foodstuffs in general comes under the category of *a specific expression by which a more general meaning is intended*. Consider this well, because there is a great deal of confusion about it. It is the first category that the *Zāhirīs* have a right to argue about, whereas they have no right to argue about the second one since it is a natural phenomenon of language, and whoever rejects it is rejecting a method of expression of the Arabs.²⁶

Qiyās is more explicitly defined here as “the specific by which a specific meaning is intended,” in opposition to “the specific by which a general meaning is intended,” which licenses the substitution of a general expression for a more specific one. In the latter case, there is a notification (*tanbīh*) contained in the text that allows the exegete to move from the known case to the unstated one, through a general meaning encompassing the two and intended by the Lawgiver. In contrast, there is no such general meaning in the case of *qiyās*, where the transfer is directly from one specific case (the one uttered by the Lawgiver) to another specific case. Averroes

²⁵ For this example, rejected by Averroes, who considers it a very weak *qiyās* of similitude based on a mere homonymy of terms, see *Jurist's Primer*, at Averroes 2006: II.22–23.

²⁶ *Jurist's Primer*, at Averroes 2006: I.xlvi–xlvi. English trans. in Dutton 1994: 201–2, slightly modified. The italics are mine.

gives the same example, the analogy between the amount of punishment for the wine drinker and that meted out to the slanderer. In order to illustrate the closely related case of the specific by which a general meaning is intended, he gives the example of items that may not be traded with usury; this is a substitution that may mistakenly be taken as a *qiyās*. A prophetic tradition enumerates only four substances forbidden to usury. The different legal schools have extended the prohibition following an implicit general meaning that they have extracted from the wording of the text. For the Mālikīs, the Legislator had in mind staple foodstuffs, for the Shāfi'īs it is foodstuffs in general, while for the Ḥanafīs it is any measurable substance. As for the Zāhirīs, they limit the status to the substances that are explicitly forbidden in the text.²⁷ The legal reasoning used by the other schools, but rejected by the Zāhirīs, consists in grasping a general meaning identified as the intention of the Legislator and then applying it to a new specific case. The transfer is not directly from a specific case to another specific case, as happens in what Averroes considers to be real legal *qiyās*. Rather, it happens through the mediation of a general meaning.

In sum, the absence of a general meaning implicitly embedded in the wording of the text enables the jurist to identify which operations are a real legal *qiyās*. As in the *Abridgement*, this clarification aims at reconciling the opposing views of the majority of the jurists with that of the Zāhirīs, who can merely contest the use of *qiyās*. However, while Averroes mentions a criterion that allows us to tell a real *qiyās* apart from a false one, he does not deal with the other side of the problem, that of the production of this type of reasoning. If there is no middle term joining the original case and the new one, how can the jurist make the transition from one case to another? In other words, what is in common between the degree of punishment for slandering and that of drinking wine, or between the minimum amount for a dowry and the minimum amount for which the hand may be cut off as punishment for stealing?²⁸ The two cases are obviously too far apart to fall under the same genus or to have in common a deducible cause or a shared quality. Yet they must have in common something that, without being a general term, supports the truth or the acceptability of the analogy. Otherwise, any two specific cases could constitute the two terms of a legal *qiyās*, which is obviously not the case. Averroes alludes briefly to that issue

²⁷ *Jurist's Primer*, at Averroes 2006: II.158–63.

²⁸ Note that in the two cases, it is not the very *existence* of the punishment or of a minimum amount that is deduced from the original case, since this existence is attested in the texts, but rather the *quantity* of the punishment or of the amount.

by talking about “some similarity” between the two, without giving more details on this specific operation that constitutes, as he puts it, a cause of confusion for the jurists.

Juridical *Qiyās* and Aristotelian *Exemplum* in al-Fārābī

In the *Jurist's Primer*, Averroes seems to claim credit for this distinction in the field of law, since he accuses all other jurists of confusing the two operations, that of *qiyās* and that of the substitution of the general for the particular. Obviously, none of the theoreticians before him thought to seek the true nature of what is called *qiyās* in law. Had they done so, they could have dispelled the disagreement over the legitimacy of this operation, which was based on a misunderstanding. My claim in this final section is that the origin of this distinction is not to be found in the legal tradition but rather in the philosophical one. More precisely, it corresponds to Averroes' reading of al-Fārābī's treatment of legal inferences (*al-maqāyīs al-fiqhiyya*).²⁹

The taxonomy of legal inferences found in al-Fārābī is identical to the aforementioned one in the *Jurist's Primer*. It proceeds by combining the two concepts of universal (*kullī*) and particular (*juz'ī*). The “principles (*al-mabādī*)” resulting from this combination are announced at the beginning of the section: (I) the universal considered as a universal, (II) the universal substituted (*ubdila badal*) for the intended particular, (III) the particular substituted for the intended universal, and (IV) the example (*al-mithāl*).³⁰

Case I is illustrated by the proposition: “All wine is forbidden,” taken by al-Fārābī as a universal proposition. All singular cases (“this thing found in the carafe”) falling under this proposition are ruled by the same legal status. In this case, there is no real legal inference since one simply applies an unproblematic ruling to a text. Case II is that of a restriction of a general proposition by a quality or a condition. Al-Fārābī gives the example of the punishment exacted against the thief, which is specified by a minimum amount stolen in order for it to be applicable. In this case, “the thief” is

²⁹ I use the edition of al-‘Ajām, which places the two sections of al-Fārābī on *nuqla* and on *qiyās fiqhī* at the end of his *Book of the Syllogism* (*Kitāb al-Qiyās*), following the order of the manuscripts of Bratislava and Hamidié. These sections, however, have been added to this book at a later date and belong properly to *The Smaller Book on the Syllogism* (*Kitāb al-Qiyās al-saghīr*), which is subtitled “On Logic According to the Method of the *Mutakallimūn*.” See Black 1990: 173 n. 98 and Lameer 1994: 18.

³⁰ *Al-Maqāyīs al-fiqhiyya* 54.9–11 in al-Fārābī 1986. For a systematic analysis of the whole chapter on legal inferences, see Lameer 1994: 231–56.

restricted to “[only] some thieves” (*ba’d man saraqā*), that is, those thieves who have stolen enough to fall under the ruling; this corresponds to the real intention of the Legislator. Case III is that of a particular substituted for the general, illustrated by two examples. The first is the celebrated example of the a fortiori argument: from the Qur’ānic ban on using the interjection *uff* against one’s parents (Qur’ān 17:23), the jurists extend the interdiction to any sort of annoyance or anger. The second one, interestingly, is that of the four substances in the case of usury, also used by Averroes.

Case IV, the example (*al-mithāl*), is more precisely the Aristotelian *exemplum*, defined as a reasoning from “part to part.”³¹ This operation is defined as:

Taking³² two similar things and applying to one of them a status in virtue of a qualification that makes it similar to the other. The thing of which the status is known is the *exemplum* of that of which the status is unknown.³³ This status is thus transferred to the similar thing. And we know that the status that applies to one of the two is the one that applies to the other only by virtue of that by which they are similar, so that of which the status has been clarified is almost substituted for what the two things have in common. The *exemplum* is very close (*yakādu yakūnu qarīb^{am}*) to the particular used instead of the universal, and one knows the validity of the status that applies to that by which the two are similar in the same way one knows the universal instead of which the particular has been used.³⁴

Al-Fārābī argues then that the same example aforementioned, that of the four substances, can also be applied to this case. Wheat, stated among the four substances, would be an *exemplum* (*mathalan*) for rice (the new case) in virtue of their resemblance: being either edible or measurable. Since al-Fārābī does not give any other example for case IV, one can conclude that there is no difference between the two last cases: case IV could be nothing more than an alternative way to present case III. In the latter, we stop at the universal class of qualified substances (foodstuff or measurable), while in the former, we go down again to another particular, for example rice. According to this reading, when al-Fārābī says that the *exemplum* is very close to the particular used instead of the general (*yakādu*

³¹ See Aristotle *Rhetoric* I. 2, 1357b26–27 and *Prior Analytics* II. 24, 69a15–16. On *exemplum* in the rhetorical tradition of Arabic philosophers, see Black 1990: 171–78.

³² Reading *akhdh* with Dānis Paḏūh in al-Fārābī 1987: I.191.12, instead of *aḥad* in al-‘Ajam’s edition.

³³ The *mithāl* refers then to the whole operation and to the first term, or what we can call the original case.

³⁴ Al-Fārābī 1986 (*al-Maqāyīs al-fiqhiyya*): 62.1–7.

yakūnu qarīb^{an} min al-amr al-juz'ī), he simply means to point out that the two cases are similar, with the verb *yakādu* implying no distinction between the two operations. From a juridical point of view, one can say that according to that reading, every *qiyās* of resemblance is based on an extension of the Lawgiver's intention and falls under the heading of the substitution of terms, that is, al-Fārābī's case III.

In his book on al-Fārābī's syllogistic, Joep Lameer adopts this reading in the chapter devoted to *qiyās fiqhī*. He explains the presence of case IV as an oversystematization and in light of the correspondence established elsewhere by al-Fārābī between juridical *qiyās* and the rhetorical *exemplum*, since both have the connotation of "comparison."³⁵ He points out the different perspectives taken in cases I, II, and III, on the one hand, and case IV, on the other. In this last case, the relation is between the conclusions, while in the first three cases the connection is between the original rule and its application as a "major premise." "Therefore al-Fārābī would have mistakenly regarded the level of the relations in I through IV as one and the same, which it is not."³⁶ The real difference between cases III and IV is therefore in the presentation of the question: in case III, there is a passage from a particular (the four substances) to a universal intended by the Lawgiver, that is, the whole range of foodstuff or measurable substances, while in case IV, there is a passage from a particular to a fifth substance, that is, rice. This requires, however, invoking the universal case as part of a general rule, under which both elements would fall.

Regardless of al-Fārābī's real intention with this classification, the distinction Averroes establishes between a specific case substituted for a general meaning, as with the four substances, and the specific case whose intention is another specific case, like the amount of punishment for wine drinking, stems from his reading of this section. Having in mind all the polemics concerning the legitimacy of *qiyās*, Averroes found in al-Fārābī a useful distinction between linguistic operations (cases I, II, and III) and an inferential one (case IV). This distinction was left unused by al-Fārābī, who was less sensitive than Averroes to the juridical debate about the scope and the legitimacy of legal analogy, even if he was well aware of its existence.³⁷ He describes in a systematic fashion the whole range of juridical reasoning by using logical tools, so that his treatment fits perfectly well within a logical treatise. By contrast, Averroes' text belongs to the juridical genre. Hence the logical terminology of al-Fārābī, who talks about

³⁵ Lameer 1994: 253, 258. Cf. *Khaṭāba*: 83.16–17 in al-Fārābī 1971.

³⁶ Lameer 1994: 253.

³⁷ *Khaṭāba*: 83.15–85.3 in al-Fārābī 1971.

mithāl, is replaced by the more juridical *qiyās fiqhī*, based on the equivalence of the two operations found in al-Fārābī's *Rhetoric*.³⁸ While al-Fārābī names his section *al-maqāyīs al-fiqhiyya* in a broad sense, following explicitly the Aristotelian program in the Arabic translation of *Prior Analytics* II. 23,³⁹ Averroes applies the term *qiyās fiqhī* in a stricter sense and reserves it for what he considers the sole instance of inferential reasoning discussed in the treatise – even if, as already noted by al-Fārābī, the *exemplum* is not, strictly speaking, an application of deductive reasoning but rather of inductive reasoning.⁴⁰ As we saw earlier, this insistence on the peculiarity of *qiyās* in contrast to the more common operation of substitution (*ibdāl*) is directly relevant to the anti-analogy polemic, since *qiyās* is the only operation that can be contested by the *Zāhirīs*.

Following Averroes' reading of the text, the *yakādu yakūnu qarīb^{an}* and the *ka-annahu ubdila* of the aforementioned passage do imply a real difference, so that there is a possible confusion that must be avoided, between linguistic substitution and real *qiyās fiqhī*. To justify a contrast between cases III and IV, Averroes could rely on al-Fārābī's description of the status of the universal term in this last figure. Its status is problematic in al-Fārābī's text, which leaves open an alternative reading according to which there is a difference between the last two cases. Al-Fārābī says at one point that when the similitude between two things can be grasped without having in mind the *exemplum* (original case), "it is likely that the *exemplum* is not useful in the transfer to its similar (*lā yuẓannu anna li-l-mithāl fī l-nuqla ilā shabīhihi ghanā*)" and the utility is exclusively that of the universal premise." In other words, once we arrive at the universal there is no need to bear in mind the original case when we apply the general rule to a second case. This sounds similar to case III. However, in the following excerpt, al-Fārābī introduces a second way in which the juridical reasoning could proceed:

It is possible that the object by which the resemblance occurs is not extracted (*ghayr muntaza*) from the *exemplum* nor isolated from it (*wa-lā mufrad*), but that it is represented in the mind being associated (*muqtarin*) to the *exemplum*, so that it creates the validity of the status of

³⁸ *Khaṭāba*: 63.10–11 in al-Fārābī 1971.

³⁹ As stated in the introduction to his epistle (*al-Maqāyīs al-fiqhiyya* 54.5–9 in al-Fārābī 1986). On the Arabic translation by Tadhārī of *hoi rhētorikoi* (in *An. Prior* II 23, 68b9–14) by *al-fiqhiyya wa-l-khuṭbiyya wa-l-mashwariyya* and its reception by al-Fārābī, see Aouad 1992: 168–73.

⁴⁰ Since it is, as Aristotle says, a "rhetorical induction" (*Rhetoric* 1356b3–5). That is why al-Fārābī says that for logicians, unlike laymen and theologians, *qiyās* is more suitable to describe enthymeme than to describe *exemplum*. *Khaṭāba*: 85.6–7 in al-Fārābī 1971.

the other thing while remaining associated with the *exemplum*. In this case, there is no actual production of a universal premise in an absolute sense, and this premise remains related to the *exemplum*, which is particular. However, the power of this premise is that of a universal, so that the transfer is validated for that reason to the objects subsumed under that thing by which resemblance occurs. It is likely, for that transfer, that it happens from the *exemplum* to its similar and that it is from a particular to another particular and not from a universal to another particular, as is the case with syllogism. That is why we have the opinion that the *exemplum* (*tamthīl*) is not a syllogism. And that is why Aristotle said of the *exemplum* that it is something that is neither like the whole to the part nor like the part to the whole, but like the part to the part. The transfer in the example is neither a transfer from a particular in an absolute sense without a universal, nor from a universal in an absolute sense without a particular but from a particular associated with a universal or from a universal associated with a particular. That is why the particular becomes like a universal and this universal like a particular. From this it appears that Aristotle considers that when one isolates the universal premise without the *exemplum* and carries out a transfer from it to what is under the subject of the premise, the transfer is not “paradigmatic” (*mithāliyya*), but he considers the *exemplum* and the “paradigmatic” transfer related to it as the second type we just mentioned here. He also considers the former to be a syllogism in an absolute manner, while the latter is not a syllogism but has the power of syllogism.⁴¹

Al-Fārābī presents here another possible type of *exemplum* (*wa-qad yumkinu . . .*) different from the first one, where the original case is not used in reaching the conclusion. The main difference between the two types lies in the status of the universal premise that unites the two particulars and secures the resemblance that facilitates the whole operation. In the first case, the universal premise is fully actualized, which is why there is no need to invoke the original case. With the second case, the universal premise is not actualized “in an absolute sense,” that is, independently of the particular in which it is embedded. It exists only tacitly, without the reasoner extracting it from the original case with which it is associated. In providing the universal premise with this peculiar status, al-Fārābī is not motivated by the desire to clear up any juridical issue; a sign of this is his failure to give any example for this use of *exemplum*. The passage is rather a philosophical digression, which seeks to explicate the Aristotelian definition of *exemplum*. If the *exemplum* is used to make a transfer from particular to particular, one must explain how the original

⁴¹ al-Fārābī, *al-Maqāyis al-fiqhiyya*: 63.2–16. Cf. Gyekye 1989: 140–43 for an analysis of this passage.

case plays a role in this operation. According to al-Fārābī, this still happens through its association with the universal premise, which keeps its “power” to render the original case a basis for the inference, even if it is not fully actualized. Only in that case can one speak of *exemplum*.⁴² Strictly speaking, in fact, we should reserve the term *exemplum* for this sort of transition from particular to particular, to stick to the Aristotelian definition of this operation; once a universal is invoked, it no longer falls under this heading. Either way, the same conclusion is reached, in one case through a universal premise that is actually – that is, explicitly – formulated, in the other through a particular that is tacitly associated with a universal. In this latter case, the absence of an actualized premise would be the mark of the abbreviated character of rhetorical reasoning, where not all premises are explicitly uttered. This need not affect the object in itself, which remains identical, but the mind grasping it: that of the orator, who deliberately omits it, or that of the listener, who did not extract it. On this reading, the same juridical analogy is merely being formulated in two different ways, and both ways can be illustrated by the same juridical example of usury, which finally corresponds to case III.

However, the status of the universal could also reflect a difference in the object itself, giving rise to two genuinely different types of reasoning. The first type – with an actualized premise – can still be reduced to case III, while the second type – with the premise in potentiality – is a new one that gives case IV its peculiarity. This reading corresponds to that of Averroes and to what I discussed earlier concerning the difference he draws in the *Jurist's Primer* between, on the one hand, “a specific expression by which a more general meaning is intended” and, on the other, the *qiyās fiqhī*, which applies “when there is a specific expression by which a specific meaning is intended.” Formulated in juridical terms, the full actualization of the universal premise, and its extraction from the original case, is tantamount to a substitution of the specific expression with a general one, which is identified as the intention of the Legislator. From this universal expression, the exegete would then go down to new particular cases. This is illustrated, in the *Jurist's Primer*, by the usury example mistakenly considered by the jurists as a *qiyās fiqhī*. Following al-Fārābī's typology, this first type falls into case III. However, in the second type the universal premise is neither entirely extracted from the particular nor fully produced in actuality in the mind. For Averroes, this is not a different way of presenting the same juridical reasoning mentioned before, but a different operation, the

⁴² Al-Fārābī, *al-Maqāyīs al-fiqhiyya* 63.13–16.

genuine *qiyās fiqhī*, which allows him to fill in the fourth case, which was formal and left empty in al-Fārābī's typology. In that case, the transfer is directly carried out from one particular associated with a universal to a second particular. From the amount of the punishment for slandering, the exegete goes directly to the amount of wine drinking, without forming in the mind a universal premise extendable to future cases. As Averroes says in the *Abridgement*, there is no *tanbīh* in this case that leads us to a general intended meaning or, put in al-Fārābī's terminology, leading to an actual universal premise. This weak ontological status of the mediation – a universal premise always associated with the particular – is what characterizes the *exemplum*, situated at the bottom of the epistemic scale, and can justify the critiques of the *Zāhirīs*.

Conclusion: *Qiyās Fiqhī* in the *Decisive Treatise*

Evidently the position of Averroes did not change from one treatise to another, since we find in both of them the same idea of reducing to its minimum the scope of legal *qiyās* without denying its existence, by emphasizing the linguistic nature of most juridical reasonings, which involve interpreting the omniscient intention of the Legislator. However, the formulation of this distinction is more clearly stated and explained in the *Jurist's Primer*. In both texts, the discussion is explicitly oriented toward a strategic issue, that of reconciling the opposite views of the different legal schools including the *Zāhirīs*. As a conclusion, I would like to go back to the mention of *qiyās* in the *Decisive Treatise*. This mention, on which Averroes builds his argument in favor of syllogism by virtue of an analogical reasoning, should not be considered as a shift in Averroes' view, but should be examined in the special context of this *fatwā*. Here Averroes does not address experts of the Law from within the discipline but holds a general discourse about the place of reason in different fields, in order to give a legal foundation to the practice of philosophy against the attacks of al-Ghazālī. His mention, in this context, of legal *qiyās* could be read above all as a premise conceded to the pro-analogist majority. One can criticize Averroes for not underlining the difference between *qiyās shar'ī* and *qiyās 'aqlī* and giving his reader the misleading impression that these two operations are two species belonging to the same genre. We may add that the use of legal *qiyās* in this treatise is less technical and restrictive than its uses in the *Abridgement* and in the *Jurist's Primer*. In the *Decisive Treatise*, the operation does not cover solely the rhetorical *exemplum* but is more extended and used in its traditional sense, covering a whole range of

exegetical operations. Yet despite these differences, the legal foundation of philosophy in Islamic society offered by Averroes does not rest on a sophistic reasoning but aims to connect the activity of the *mujtahid* who speculates on the basis of juridical premises to that of the philosopher who speculates based on rational premises. By focusing on the difference between the nature of the premises, certain for philosophy and probable for law, Averroes succeeds in recalling the common epistemic hierarchy between theory and practice, readily admitted by theologians like al-Ghazālī, in order to settle the question of the hierarchy between philosophy and law.⁴³ In that context, which is external to juridical debate, distinguishing more finely between the operations of legal reasoning would have been excessively technical.

Either way, be it an *exemplum* or a substitution of terms, the Qur'ānic injunction to engage in "reflection" (*i'tibār*) does apply in both cases and justifies another transfer: from *qiyās* in the familiar legal sense to *qiyās* in a derived sense, that is, the demonstrative syllogism. Moreover, even if juridical reasoning in most cases involves grasping of the implicit intention of the Lawgiver and functions like ordinary discourse (*al-mukhāṭaba al-jumhūriyya*), this does not make it an intuitive sort of reasoning that is within everybody's reach. The intention of the Legislator is not accessible to laymen, according to Averroes, and the Qur'ānic injunction of *i'tibār*, which applies to both speculative and practical reasoning, should be taken to apply to only a small group within society, be it the *mujtahids* or the philosophers. Despite his deflationary use of *qiyās* in Law, Averroes finally upholds in legal reasoning one of its more important consequences, namely its monopolization by an elite of jurists.⁴⁴ As is clear from the end of the *Abridgement* in the section on the conditions required to become a *mujtahid*, which he borrows from the juridical tradition, Averroes keeps within his juridical frame the two complementary activities of interpretation (*ijtihād*) and conformism (*taqlīd*). The dialectical interplay between the two notions gives him a kind of juridical foundation for the social model developed in the *Decisive Treatise*. The dichotomy between the philosopher and layman is echoed by the juridical opposition between *mujtahid* and *muqallid*. In both cases, the obligation to speculate applies to a minority of scholars, with other people prohibited from doing so. The laymen should rely on *mujtahids* for juridical issues and on philosophers for theoretical truth.

⁴³ On which see Bou Akl 2016: 273–76.

⁴⁴ Zysow 2013: 179.

CHAPTER 4

*Averroes' Corrective Philosophy of Law**

Feriel Bouhafa

Early Orientalist legal scholarship understood Islamic law as an imposed, ethical code of behavior. The common perception was that the Prophet Muḥammad did not originate a new legal system, but rather came to teach the new community how to act based on moral and religious standards. This meant that Islamic law had as its foundation a religious taxonomy based on textual references to morality rather than juridical categories.¹ Linked to divinely ordained directives, this moral dimension ascribed an idealistic value to religious law, removing it from the contingencies of political realities.² Working from this assumption, many attributed to the divine law a conclusive and immutable character,³ implicitly denying that Islamic law could play a role in any open-ended philosophical reflection on law and good governance.⁴ In the case of Averroes, it has been supposed that since he too understood the law to be irrevocable, he refrained from philosophizing about it – even if he also professed its harmony with philosophy, so as to prove the philosophers' orthodoxy.⁵ Recently, though,

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¹ This position is reflected in Schacht 1964: 1–2. For a critical assessment of Orientalist position on Islamic law, cf. Johansen 1999: 45–72.

² Cf. Hallaq 2009a: 2.

³ For more positions on the absence of natural law theory or practical ethic in Islamic law, see Brunschvig 1970: 9; Gibb 1962: 111; Makdisi 1997: 130. For a counter argument, see Emon 2010.

⁴ This is typical of the approach adopted by Leo Strauss and his followers. For Strauss (1965: 7–21), Jewish and Muslim philosophers were bound by the authority of the revealed law, hence their endorsement of an ideal Platonic state with a prophet-philosopher-king. See further Strauss 1953: 158–59 (cf. Strauss 1995: 57–58) as well as the works of Charles Butterworth, who adopted the Straussian approach in his study of Averroes' theory of rhetoric (Butterworth 1966, 1972, 1984, and 1998). For a critique, see Gutas 2002: 19–25.

⁵ For early examples of this tendency, see Renan 1861; Gauthier 1909.

new evidence has suggested a more complex view of the argumentative nature of Islamic jurisprudence in general, one in which Muslim jurists employed probabilistic techniques for determining their legal findings.⁶ It has even been suggested that a skeptical epistemology underlies Islamic jurisprudence.⁷ If these proposals are correct, then why think that Averroes, who was famously both a jurist and a philosopher, would feel inhibited from making law a subject of philosophical reflection?

In the following I will argue that Averroes did develop a philosophy of law, in the context of discussing the relation between law and rhetoric.⁸ Exploring the sources of the law and its evolution as expounded in *Ep. Rhetoric*, *Paraph. Rhetoric*, and his legal work the *Abridgement*, my argument proceeds along three lines.⁹ First, I will show that Averroes subscribes to the probabilistic epistemology of Islamic jurisprudence and associates this with the probable and argumentative nature of rhetorical discourse. Thus legal proofs are compared to rhetorical convictions; he also underlines the practical aim of using probable opinions to eliminate injustice. Second, I will examine Averroes' discussion of written law (*sunna maktūba*) and unwritten law (*sunna ghayr maktūba*) in his *Paraph. Rhetoric* and argue that he holds a corrective view of law based on the persuasive authority of rhetoric.¹⁰ Third, I will demonstrate that Averroes justifies this corrective view of law by appealing to the concepts of *ijtihad* (individual legal reasoning) and *al-qawā'id al-fiqhiyya* (legal precepts).

⁶ While I draw especially on Johansen 1999, I also refer to Hallaq 1984: 3–41; 1990: 3–31; 2009a and 2009b; and Zysow 1984.

⁷ Johansen 1999: 36–40.

⁸ Here I adhere to the definition of philosophy of law used by Butterworth (2007: 219; cf. March 2016) as a rational reflection on the general foundation of law in terms of its sources and evolution. Still, I should note that I produce a different account of Averroes' philosophy of law from what was proposed by Butterworth and March. In fact, on the relation between law and rhetoric, my argument builds on Black 1990; the remarks of Aouad in *Paraph. Rhetoric* and Aouad 2007b; Bou Akl in *Abridgement*.

⁹ For *Ep. Rhetoric* I use Butterworth's edition and his translation (Averroes 1977) with some modifications, but shall provide both the Arabic and English page references. For *Paraph. Rhetoric* I shall provide my own translations, but my references will follow the division into numbered sections in the Arabic text. Finally, for the *Abridgement* I shall provide my own translation based on al-Alawī's edition (Averroes 1994a).

¹⁰ Aouad was the first to identify the importance of this contrast in Averroes' *Paraph. Rhetoric*. See Aouad's detailed discussion of the written and unwritten laws in chapter 2 of his introduction to the text (*Paraph. Rhetoric* I.120–26), chapter 3 of his analysis (*Paraph. Rhetoric* I.137–45) focusing on §§1.12.42–1.14.12 and 1.15.1–1.15.62, and finally Aouad's own commentary on the different passages on the written and unwritten laws with a parallel comparison between Averroes' text, Aristotle's *Rhetoric*, and the Arabic translation of *Rhetoric* used by Averroes, in *Paraph. Rhetoric* III. 186–209.

The Skeptical Epistemology of Jurisprudence

The root of the word *fiqh* (*f-q-h*) implies comprehension of speech.¹¹ As this suggests, the enterprise of the jurists (*fuqahā*) is fundamentally an interpretive one. In more precise terms, *fiqh* stands for the system of rules and methods used to reach a normative understanding of revelation to define human actions.¹² As in any legal system, jurists had to use the finite basis of law to deal with an indefinite range of novel situations, a problem they addressed with explicit discussion of their sources and method.¹³ The establishment of legal norms relied on a formalistic process grounded in the principles of jurisprudence: the rules of law as set forth in scripture, the normative practice of the prophet, consensus, and analogical reasoning.¹⁴ As Baber Johansen has shown, jurists admitted that this process could reach merely probable results.¹⁵ Where the revelation constitutes absolute knowledge, human interpretation can claim only probable validity, relying on the “preponderance of opinion (*ghalabat al-ẓann*).”¹⁶ Central to the whole procedure was the concept of *ijtihād*, the individual effort to interpret legal rules and apply them to a new case, something that has been described as a “best guess of what [the jurist] thought might be the law pertaining to a particular case.”¹⁷ Judges also accepted that their decisions are imperfect, since they rely on linguistic evidence taken from witnesses and oaths, which may be ambiguous.¹⁸ The legal judgment is inevitably based on the available evidence, not on people’s intentions, since these only God can access.¹⁹ Of course these points were understood not to undermine the authority of the law, but rather to ensure its applicability and continuity.

Averroes’ response to these ideas emerges in his works devoted to Aristotle’s *Rhetoric*, in which he treats rhetoric as a logical discipline with a political function.²⁰ It produces assent (*taṣdīq*) by means of merely probable opinions,²¹ unlike demonstration, which works from certain premises.²² As Averroes puts it: “it is apparent that persuasion (*al-qanāʿa*)

¹¹ El-Shamsy, “Fiqh, faqīh, fuqahā,” *ELJ*. ¹² Johansen 1999: 1. ¹³ Cf. Opwis 2005: 184.

¹⁴ Cf. Johansen 2007: 39. This method is often linked to Shāfiʿī’s effort to erect a hierarchy of principles for legal norms, which set (1) the Qurʾān, then (2) the *sunna* of the Prophet, (3) consensus (*ijmāʿ*), and (4) analogical reasoning (*qiyās*). See Johansen 2013: 128–29.

¹⁵ Cf. Johansen 1999: 37. ¹⁶ Johansen 1999: 36–40. ¹⁷ Hallaq 2009b: 27.

¹⁸ Johansen 2007: 40; see also Johansen 2002: 169. ¹⁹ Ibid.

²⁰ *Ep. Rhetoric* 197–98 (§45); English at Averroes 1977: 78; *Paraph. Rhetoric* II.8, 27 (§§I.1.13 and I.3.1).

²¹ *Ep. Rhetoric* 169 (§1); English at Averroes 1977: 63; *Paraph. Rhetoric* II.7–8 (§§I.1.11 and I.1.12). Cf. Black 1990: 79–80.

²² *Ep. Rhetoric* 151 (§1); English at Averroes 1977: 47. Cf. Black 1990: 86.

is a kind of a preponderant opinion (*ẓann mā ḡhālib*) which the soul trusts (*taskunu ilayhi al-naḡs*), despite its awareness of an opposing consideration.²³ Inclining to an opinion implies an acquiescence or a state of tranquility of the soul.²⁴ This statement evokes the pervasive role of persuasion in Islamic jurisprudence: jurists often argued that preponderance of opinion (*ḡhalabat al-ẓann*) could be a sound basis for legal ruling. The parallel is no mere semantic coincidence. In the *Paraph. Rhetoric*, Averroes associates the political role of rhetoric with its capacity to persuade on matters of law and justice.²⁵ To make his point, Averroes incorporates a discussion of legal proofs under the heading of arguments based on testimony (*shahāda*). Averroes defines *shahāda* as a kind of report,²⁶ which transmits human knowledge about past statements without any direct empirical basis.²⁷ He gives the examples of *tawātur*, prophetic report based on a concurrent chain of transmission, and *āḡḡād*, solitary reports based on one or very few transmitters, which therefore have a weaker evidentiary status.²⁸ Both *tawātur* and *āḡḡād* are seen as inducing rhetorical conviction or assent.²⁹ Here I will limit myself to a brief summary of Averroes' views on *tawātur*, but will provide a fuller discussion of *āḡḡād*.³⁰

In his *Ep. Rhetoric*, Averroes recognizes that *tawātur* can induce certainty³¹ but argues that this type of certainty is only accidental: "for the greater number of people, assent to something like this comes about by means of the concurrent transmission and exhaustive reports. However, it is clear that this is an accidental effect."³² For Averroes, investigation into the cause of this accidental certainty produced by *tawātur* does not fall under the art of rhetoric; he instead refers us to *Comm. Parva Naturalia*.³³ There he explains how people form an image about matters conveyed to them through hearing, linking this capacity to the internal senses.³⁴ He offers the following example: one can form an image of an elephant in one's mind despite never having seen one in person, based on descriptions

²³ Averroes 1977: 63, slightly modified; Arabic text at *Ep. Rhetoric* 169 (§1).

²⁴ Cf. Black 1990: 103–8. ²⁵ *Paraph. Rhetoric* II.6 (§1.1.10).

²⁶ *Ep. Rhetoric* 189 (§35); English at Averroes 1977: 74.

²⁷ *Ep. Rhetoric* 191 (§38); English at Averroes 1977: 75.

²⁸ Cf. Wensinck and Heinrichs, "Mutawātir," *EL*2.

²⁹ Averroes uses *taḡḡḡiqāt* to refer to the outcome of legal proofs: see *Paraph. Rhetoric* II.129–30 (§1.15.25).

³⁰ For more on the topic of *tawātur*, see Bou Akl's remarks in *Abridgement* 16–31; Aouad 2007a: xlvii–lxiv; Aouad 2007b: 161–81.

³¹ *Ep. Rhetoric* 191–92 (§§37–38); English at Averroes 1977: 75.

³² *Ep. Rhetoric* 192–93 (§39); English at Averroes 1977: 75–76, slightly modified.

³³ *Ep. Rhetoric* 193–94 (§40); English at Averroes 1977: 76. ³⁴ *Comm. Parva Naturalia* 28.

provided by others. As Aouad has noted, it would seem to be this process that produces the accidental certainty elicited by *tawātur*. This psychological account led Aouad to conclude that Averroes relegated *tawātur* to the status of illusion.³⁵ Bou Akl asserted, however, that this conclusion is not feasible, since it would put Averroes on the side of the sophists. He contends that Averroes' argument is meant to solve a problem that concerned legal theorists, namely, how to validate the quantitative criteria of reports.³⁶ Now, Averroes' association of *tawātur* with a psychological process is premised on the fact that the certainty produced is only internal to the soul.³⁷ Thus Aouad seems right to conclude that *tawātur* can provide only probability, which explains its connection to rhetoric. Still I would follow Bou Akl's conclusion that Averroes deems the certainty produced by *tawātur* to deal with past events that can no longer be sensed.³⁸ Indeed, Averroes wants to emphasize *tawātur*'s capacity to produce assent in the realm of contingent historical information, even if this falls short of the kind of assent produced by demonstrative syllogisms and sense perception.³⁹ I would also add that this stance fits with the overall goal of the *Rhetoric*, which is not to cast aspersions on rhetorical persuasion but to explore the degree of assent that rhetoric can produce. This hint to the practical outcome of historical knowledge is further expounded in Averroes' *Exposition*, where he makes *tawātur* the only valid basis for Muḥammad's prophecy and defends this on practical grounds:

The existence of the type of people called messengers and prophets is known by virtue of itself. They are the type of people who lay down laws for other people by divine revelation, and not by human education. Their existence can be denied only by the people who deny matters based on concurrent reports (*al-umūr al-mutawātira*), as the existence of all things, which we have not seen – the lives of the famous philosophers and so forth. Philosophers and all people agree, except those who pay no regard to their words (namely the *dahriyya*), that there are certain persons among people to whom have been revealed many commandments for the people in matters related to knowledge and beautiful actions which fulfill their happiness and proscribe wrong beliefs and ugly actions. This is the act of a prophet.⁴⁰

Here the belief in the existence of messengers and prophets is placed on the same footing as other kinds of historical knowledge, concerning for instance the lives of famous philosophers. This sort of knowledge is

³⁵ Aouad 2007b: 173.

³⁶ Bou Akl in *Abridgement* 20–21, 30; cf. Averroes' *Abridgement* at Averroes 1994a: 68–69 (§76).

³⁷ Ibid. ³⁸ Bou Akl in *Abridgement* 30; cf. Averroes 1994a: 68–69 (§76).

³⁹ *Abridgement*, at Averroes 1994a: 68 (§75). ⁴⁰ *Exposition*, at 1998a: 179, my translation.

accepted by both philosophers and the common people and is challenged only by sophists.⁴¹ Ultimately, though, the belief is also justified on practical grounds: we must accept the existence of prophets because they brought laws that lead us to happiness. Validity rests on concrete manifestation in human history.

Averroes, however, did not only focus on assessing *tawātur*. In fact Averroes agrees with the view, standard in the Muslim tradition, that *tawātur* arises only in rare cases.⁴² So it is not the sole focus of the art of rhetoric, which should concern itself with the kind of reports that occur “for the most part.”⁴³ More common are reports based on few transmitters or even on a single source; the latter are called *āḥād*, “solitary” reports. This category attracted a great deal of discussion among jurists, who sought to assess its epistemic nature and validity, mainly as a basis for legal rulings.⁴⁴ While most jurists agreed that the solitary report conveys probable rather than definite knowledge, some stipulated various conditions that could increase the evidentiary status of *āḥād* through the use of circumstantial indicants (*qarīna*), even to the point that one could reach conclusive knowledge.⁴⁵ Averroes briefly alludes to the role of *qarīna* to strengthen or weaken the epistemic value of reports in *Ep. Rhetoric*.⁴⁶ A more substantial discussion of *āḥād* and the role of *qarīna* can be found in *Paraph. Rhetoric* and the *Abridgement*.

For a clear definition of *āḥād* we do well to refer first to a passage from the *Abridgement*:

Overall reports and testimonies on reports can only produce opinion and that varies based on the divergence of circumstantial indicants until certainty is produced in some reports. For that reason, people held different views on the rank of convictions (*taṣdīqāt*) produced based on reports and their associated circumstantial evidence. Like the case of him who renders a solitary report as a group report, when it has not been refuted since a mass is unable based on customary practice to agree on convening a lie, and therefore takes the status of *tawātur* as if what was reported was apprehended through the senses. Also the circumstantial indicant can weaken opinion produced by reports to the effect that is almost categorically refuted, like the case of him who reported in the market the murder of the king of a town and then people from the market passed by with no mention of it [the murder].⁴⁷

⁴¹ Ibid., 180. ⁴² See Hallaq 1999: 75–90.

⁴³ *Ep. Rhetoric* 194 (§40); English at Averroes 1977: 76; cf. also Bou Akl in *Abridgement* 41.

⁴⁴ Zysow 1984: 12, 32. ⁴⁵ Hallaq 1990: 13.

⁴⁶ *Ep. Rhetoric* 191 (§37); English at Averroes 1977: 75.

⁴⁷ *Abridgement* §77, at Averroes 1994a: 70.

Averroes admits that reports can produce only probable opinion and that the degree of distinction between the different types of reports is linked to the circumstantial indicant. Under this scheme, he outlines how circumstantial indicants could strengthen the epistemic value of a report. This is indeed possible, providing that the report is issued by a community of people who are trustworthy or who are so numerous that they would be unable to collude in a lie, or alternatively that this report was apprehended through the senses. Circumstantial indicants can also weaken the epistemic value of a report, as with the example of a king supposedly murdered in the market, where passersby heard no mention of the event. The upshot is that solitary reports are unproblematic, so long as they are not accepted indiscriminately.⁴⁸ While a report that recurs a few times could lead, with the right circumstantial indicant, to a degree of knowledge, a report lacking or even undermined by such indicants would fail.

In his discussion of testimony in *Paraph. Rhetoric*, Averroes further examines the validity of solitary reports. Noting that while in certain cases you rely on testimony to reach assent, in others you rely on circumstantial indicants, he explains:

And convictions may occur either based on testimonies or the circumstantial indicants. These play the role of testimonies. Judging based on circumstantial indicants is an act pertaining to the perspicacious and the skilled among judges. For this reason, a judge should not confuse counterfeit circumstances the way a teller would confuse counterfeit silver. If these circumstances could call the judge's attention to the true matter itself in spite of the false testimony being contrary to it, they are even more fitting to call attention to the true thing when there is no testimony or when there is a testimony, which accords with them. For this matter, to the judge these circumstances play the role of the witnesses, for there is no difference between judging based on witness or these circumstantial indicants that are attached to the speakers.⁴⁹

This passage both affirms the validity of the circumstantial indicant to strengthen testimony and adds qualitative criteria to determine which jurists have the capacity to discern such an indicant correctly. This resonates with the treatment of judges in his *Paraph. Rhetoric*. There Averroes divides those who receive legal principles into two types: the conveying recipient (*sāmi' muballigh*) and the scholar recipient (*sāmi' 'ālim*).⁵⁰ The first is only a transmitter, whereas the second can also infer

⁴⁸ Zysow 1984: 33, 35.

⁴⁹ *Paraph. Rhetoric* II.129–30 (§1.15.25).

⁵⁰ *Paraph. Rhetoric* II.63 (§1.7.32).

rulings from legal principles on matters that have not already been communicated by the lawgiver. It seems likely then that "the skilled judge" who can identify reliable circumstantial indicants is the "scholar recipient." He is also the one who can be trusted to perform individual legal judgment (*ijtihād*).

Averroes comments on several scenarios in which the use of a circumstantial indicant may point the judge in the right direction. In the first scenario he endorses the capacity of an indicant to lead a judge to a proper ruling despite being confronted by a false testimony. In the second and third scenarios – where one has no testimony at all, and testimony that accords with the indicant, respectively – the judge's chances of success are higher. They are highest in the second scenario, which implies that the indicants function as signs that help the judge to reach valid rulings. Finally, Averroes relates the role of these signs to the role of witnesses in court cases. All of this is meant to support the validity of solitary reports, despite their probable nature. Witnesses are given evidentiary status in Islamic law despite their merely probable value.⁵¹ Averroes is insinuating that solitary reports should be accepted on the same ground, a position he spells out more explicitly in the *Abridgement*:

As for the solitary report, it is both warranted based on the intellect and practiced based on law. As for its possibility based on the law, it is not ruled out that God the exalted erected the predominance of opinion as a sign for establishing rulings in the manner that he erected most things as signs. On this basis, we conceive of adjudication with witnesses and to discern rulings based on the status of fatwas and to admit the direction of the Ka'ba when there was no examination. And some saw that erecting the preponderance of opinion as a sign to discern rulings in law is obligatory on the basis of the intellect. And if it weren't for that, then most rulings would be limited to him who has not spoken mouth to mouth with the prophet, peace be upon him . . . Overall, if we did not adjudicate on the basis of testimony and oaths and discern legal interpretations (*ijtihād*), there would be no way to avert injustice and defend people's rights.⁵²

As we can see from this passage, there are sound practical reasons to accept then such probable evidence as the preponderance of opinion and testimony, even in the case of solitary reports. If these were no longer admitted, most rulings would be thrown out, an absurdity that would jeopardize the objectives of the law. It is really this that is distinctive of

⁵¹ This pertains to God's call in the scripture to use witnesses as legal proof in litigious cases. Cf. Peters, "Shāhid," *Elz*. See also Hallaq 1990: 9–10.

⁵² *Abridgment* §81, at Averroes 1994a: 71.

Averroes' position. It is not uncommon to hold that, since witnessing, opinion, and *ijtihād* are valid in jurisprudential reasoning, jurisprudence itself relies on a probabilistic epistemology.⁵³ Averroes is more unusual in his practical justification of both *tawātur* and *āḥād*. As seen above *tawātur* like prophecy is justified by its practical outcome, which is bringing a law that fulfills happiness. Similarly, the validity of *āḥād* is also accepted so that we may fulfill the objectives of the law, that is, in order to uphold justice. Ultimately, then, it is for political reasons that we should permit ourselves to assent to opinions in legal contexts, even though this is the sort of probable assent elicited by rhetoric. Despite this pragmatic perspective on sources of the law, this both comes as an assessment of the main sources of the law and serves as a foundation for Averroes' philosophy of law.

A Corrective Philosophy of Law: *Al-Sunna Al-Maktūba* and *Al-Sunna Ghayr Al-Maktūba*

Another central point in Averroes' account of the relation between law and rhetoric is the contrast between written and unwritten law (*al-sunna al-maktūba* and *ghayr al-maktūba*) in *Paraph. Rhetoric*. In this context, he develops a corrective philosophy of law under the argumentative framework of rhetoric. I will first sketch the properties of each kind of law and explore how the unwritten law functions as a corrective to the written law. Then I will discuss Averroes' defense of this corrective process under the rubric of *ijtihād*, and finally show how he grounds its application in Islamic jurisprudence.

In the *Paraph. Rhetoric*, Averroes appropriates Aristotle's distinction between particular and general laws and agrees that particular laws may be corrected in light of changing circumstances.⁵⁴ In this context it is noteworthy that in his *Ep. Rhetoric* Averroes gives singular attention to the written law as a persuasive proof with no mention of unwritten law.⁵⁵ That distinction comes only later in the *Paraph. Rhetoric*:

(1) We say, then, that injustice consists of inflicting harm voluntarily in a manner which transgresses law (*sunna*). And laws are of two kinds: some are

⁵³ Zysow 1984: 35. For an exhaustive account on the various discussions among jurists on the validity of *āḥād*, see *ibid.*, 32–49.

⁵⁴ For the contrast in Aristotle, see *Rhetoric* I.13, 1373b1–18. This has often formed a basis for ascribing natural law or natural justice theories to Aristotle. See Strauss 1953; Striker 1996.

⁵⁵ *Ep. Rhetoric* 194 (§41); English at Averroes 1977: 76.

particular (*khāṣṣa*) and others are general (*ʿāmma*). Particular laws are written laws (*al-sunan al-maktūba*), which we fear would be forgotten unless they were written down; and these [particular laws] are specific to each people or each community. As for the general laws, they are unwritten laws (*al-sunan al-ghayr maktūba*), which are acknowledged by (*ya ʿarif bihā*) all people such as filial piety (*birr al-wālidayn*) and thanking the benefactor (*shukr al-munʿim*).⁵⁶

(2) As for laws that make known what is unjust and what is not, some are specific to a group of the inhabitants of a city; others are universal to all of the inhabitants of the city (*ahl al-madīna*). Of these two sorts of laws, some are written (*maktūba*) and some unwritten (*ghayr maktūba*). What I mean by the unwritten laws are those that are in the nature of all people (*ṭabīʿat al-jamīʿ*). These are what all people consider just or unjust by nature although they had no explicit stipulation or contract among one another that is between each one of them. From this point of view, these laws are sometimes called general. It is unknown when or by whom these laws were laid down. These laws oftentimes contradict written laws so that they [i.e. unwritten laws] are used to induce persuasion (*fa-yuqnaʿ bihā*) that what was believed to be unjust based on written laws is just.⁵⁷

Passage (1) occurs at the beginning of a chapter in which Averroes analyzes judicial speech as related to complaints. Following Aristotle, Averroes first defines justice as transgression against the law, and then moves to relate this transgression to both written and unwritten laws.⁵⁸ Thus injustices may involve transgressions of either the particular written law or the general unwritten law. Then, Averroes expands on the differences between the two. Averroes notes that the written law needs to be put in writing, so as not to be forgotten. Unwritten law, in contrast, does not need to be written down because it is acknowledged by all people: it depends not on an explicit stipulation but on people's agreement. Averroes' example to illustrate unwritten law is a telling one: the premise that one should thank one's benefactor is a premise used in rhetorical argument. To be specific, he includes this among the so-called praiseworthy premises (*al-maḥmūdāt*), that is, premises that enjoy universal acceptance among people.⁵⁹ One might thus say that the universal value of the unwritten law is given its theoretical basis within the logical study of rhetoric.

In passage (2) Averroes again maintains that the unwritten law involves a "natural" view concerning justice and injustice, which is shared among all

⁵⁶ *Paraph. Rhetoric* II.84–5 (§§1.10.5–6). ⁵⁷ *Paraph. Rhetoric* II.113 (§1.13.2).

⁵⁸ Aristotle, *Rhetoric* I.10, 1368b 6–9. See further Aouad in *Paraph. Rhetoric* III.155.

⁵⁹ This sort of premise is also discussed in *Ep. Topics* 158 (§13); English at Averroes 1977: 51.

people and has no need to be decreed. Here he is following Aristotle's text.⁶⁰ Averroes admits the possibility of contradiction between the written and unwritten laws, that contradiction, in turn, would require that the unwritten law intervene to mitigate flaws in the written law. In other words, the unwritten law can be used to persuade people that what the written law deems as unjust is instead just, or vice versa. Again, we see the close links between rhetorical argumentation and the persuasive status of law. But on what grounds exactly are we persuaded? The idea that the unwritten law is "natural" suggests that we all have an innate capacity to distinguish what is just and unjust. But rather than exploring this possibility, Averroes states that the origin of the unwritten laws is unknown, leaving it at this point unclear how the unwritten law carries out its persuasive function. Averroes does reveal, however, an important distinction between the two kinds of law:

He [Aristotle] said: There are laws for what are inflicted injustices and for those that are not inflicted injustices, while for others there are no laws. As for those that have laws, some are written laws and others are unwritten. Each of these [laws] gives a definition to what is just and unjust, good and bad. In fact the good according to unwritten laws are the acts of which the more man adds of these to infinity, the more glorification, praise, honor, and noble standing, attaches to him such as the cases of helping one's friends and rewarding good-doers. The bad according to unwritten laws is the act that the more a man adds of it, the more blame and more shame attaches to him, and that also adds to infinity such as the cases of ingratitude toward good deeds and harming one's friends. As for good and bad in written laws, they are determined; one can neither add to nor subtract from it.

Since this is so and determined laws neither apply to every individual nor every time and every place, they [the determined laws] are not sufficient to determine the good and bad in the conduct of every human individual. So this calls for addition to and subtraction from them [i.e. the written laws] according to what is required by the unwritten law. It is necessary to have in the unwritten law a written justice and something that goes beyond this written justice, by virtue of either an addition to or a subtraction from the written law.⁶¹

Averroes maintains that both the written and the unwritten laws define what is just and unjust and what is good and bad in human actions.

⁶⁰ Aristotle, *Rhetoric* I.13, 1373b4–17. See further Aouad in *Paraph. Rhetoric* III.187–89.

⁶¹ *Paraph. Rhetoric* II.116–17 (§§1.13.8–9).

But they differ with regard to “the quantity” of good and bad. In the case of the unwritten law, the quantity of good and bad is infinite, and therefore can be added or subtracted indefinitely. In the written law, by contrast, good and bad are finite and measured. The point here is that no written law can be applicable to all people at all times or places; its fixed quantity of good and bad will eventually prove insufficient. The blame, however, lies not with the written laws themselves but with the contingency of human action. To remedy this deficiency in the written law, we must turn to the unwritten law. One should add to or subtract from written justice (*al-‘adl al-makrūb*), that is, the quantity of justice decreed in the written law. To illustrate this process of addition and subtraction Averroes gives examples from Islamic law.

Before I discuss these, however, I first turn to his argument for the necessity of this correction, and what this implies concerning the Islamic lawgiver. As previously noted, Averroes finds that the changeability of human nature requires that the written law be open to correction. He explains this in the following passage:

This befalls the lawgivers in the written law either out of necessity or of their own making. Of their own making: when they err and lay down a universal determination when it is not universal. As for the matter itself, [it is] for the following reason: no one can lay down universal and general laws according to all people of all times and all places, for this is not finite – I mean the change of the beneficial and the harmful. The aim of the prudential lawgiver is to lay down law pertaining to as many as possible (*aktharī*), I mean, for most people in most times and in most places. The more a lawgiver makes an effort in legal reasoning (*ijtihad*) to lay down laws that have a long-lasting utility for the majority of man the better the law is. If this is so, it is out of necessity that determined law cannot be true eternally and all the times, I mean to everyone and every time. That is why sometimes it calls for an addition or a subtraction.⁶²

Averroes first grounds the necessity to correct written law in what the lawgiver encounters “out of necessity” (*bi-l-ḍarrar*), a necessity that Averroes attributes to the changing character of things, such as times, places, and people. In light of this variation, no one can possibly set down a universal law that would be appropriate for every time and place: the array of possibilities is both unseen and indefinite. The other possible reason why correction may be needed is error on the part of the lawgivers

⁶² *Paraph. Rhetoric* II.117 (§1.13.10).

("of their own making"), a point taken from Aristotle.⁶³ A relevant passage is found in his paraphrase of the *Nicomachean Ethics*:

This will be clear [or, you will clarify this] from what is laid down on the matter of war in the law of the Muslims, for the command in it regarding war is general, until they uproot and destroy entirely whoever disagrees with them. But regarding this, there are times when peace is more choiceworthy than war. As for [the fact] that the Muslim public requires this generality, despite the impossibility of destroying and uprooting their enemies entirely, they attain in this great harm; this is ignorance on their part of the intention of the legislator (Hebrew *mekhuvvan ha-torityi*) may God watch over him. Therefore it is appropriate to say that peace is preferable to war sometimes.⁶⁴

Averroes considers the example of *jihād*, the call for war against non-Muslims, to explain how the lawmakers of the Muslim community err in drawing undue generalizations. Averroes is referring to the obligation for *jihād* decreed in the scripture⁶⁵ and contends that this is not a universal injunction. In some cases, pursuing war might bring great harm upon the community, something the lawgiver would not intend. This shows that Averroes admits that jurists could err in ascribing a universal value to a particular, which would contradict the intention of the law.

In the rest of the passage cited above, Averroes frames the validity of his corrective philosophy of law in relation to *ijtihad*. He explains that the prudential lawgiver is one who applies legal reasoning to bring about laws that have a long-lasting utility for most people. In using the verb *ijtihad*, Averroes refers to the personal effort of the jurist to apply legal ruling to new cases that have not been encountered before.⁶⁶ The calibration he speaks of as an "addition and subtraction of good and bad" is an act of *ijtihad*. This deliberative reasoning process requires the jurist to discern how each law is conducive to utility. The original lawgiver's aim too was to find a fitting utility for most people, by setting down laws that will help most people in most places. The greater the lawgiver's effort in deliberating, the closer he can come to this aim. Yet no matter how fitting the law is, its utility will always be relative. Because written laws are determinate, they cannot always be true (*ṣādiqa*) in all circumstances. To put it another way, the prudent lawgiver cannot attain certainly good results but only the best possible results. Likewise, the jurist reasons to the best possible legal

⁶³ For a comparison between Aristotle's view and Averroes, see Aouad 2002: vol. 3, 195.

⁶⁴ At Feldman 1994: 238.

⁶⁵ Qur'an 9:5 and 9:29. Translations of the Qur'an are taken from *The Qur'an: A New Translation* by M. A. S. Abdel Haleem (New York: Oxford University Press, 2005).

⁶⁶ Cf. Calmard, "Mudjtahid," *El2*.

rulings; the resulting judgment is not guaranteed to arrive at a just outcome, but the procedure is flexible and can respond to individual circumstances.

In his elaboration of the corrective function of the unwritten law, Averroes draws on the juridical theory that qualifies types of human action as obligatory (*wājib*), recommended (*mandūb*), neutral (*mubāḥ*), disliked (*makrūh*), and forbidden (*muḥarram*).⁶⁷ The performance of obligatory acts is rewarded while their omission is punished. Given the finite number of laws that could stipulate what is obligatory, jurists have sought to establish a method to ascribe a normative basis to the indefinite range of human actions. Averroes alludes to this while discussing injustice and the unwritten law:

We have first to introduce the sorts of injustice and the obligatory (*al-wājib*), by which I mean that which is not unjust. As was already said in what preceded, the types of injustice occur with regard to two things: they are either the pleasant (*al-ladhīdh*) or the beneficial (*al-nāfiʿ*). These types come to pass within the things in which they come to pass in two ways: either by averting harm (*dafʿ al-maḍarra*) or acquiring benefit (*ijtilāb manfaʿa*).⁶⁸

Unlike Aristotle, who classifies just and unjust actions according to types of laws and people,⁶⁹ Averroes states that injustice has two modes, relative to the beneficial and the pleasant, which hints at a teleological understanding of the norms of action. To grasp this teleological dimension, one should refer to his definition of the obligatory in the *Abridgement*. There, Averroes explains that Muslim jurists could not have conceived of the obligatory independently of the harmful (*al-ḍarar*) and beneficial (*al-nafʿ*).⁷⁰ The obligatory is that which is serviceable to an end, and essentially relates to the interests of the agent himself – that is, either the avoidance of harm or the attainment of benefit.⁷¹ The parallel again suggests that Averroes understands the Aristotelian concept of an unwritten law through the lens of Islamic jurisprudence, even that he turns to jurisprudence to give this concept a legitimate foundation.

When the jurist “adds to or subtracts from” the written law on the basis of the unwritten law, he must do so in proportion to the degree of injustice he seeks to eliminate.⁷² A great injustice would require a harsher application of law (an “addition of the quantity of bad”) while a lesser injustice

⁶⁷ Cf. Juynboll, “Fard,” *Elz*. ⁶⁸ *Paraph. Rhetoric* II.112–13 (§1.13.1).

⁶⁹ Aristotle *Rhetoric* I.13, 1373b1–3. See also Aouad in *Paraph. Rhetoric* III.187.

⁷⁰ *Abridgement*, at Averroes 1994a: 44. ⁷¹ Cf. Hourani 1976: 72.

⁷² *Paraph. Rhetoric* II.120–21 (§§1.14.1–3).

might call for the jurist to impose a lesser penalty (a “subtraction of the quantity of bad”). Through these processes, the jurist can make lenient law more severe and mitigate overly harsh law. Regarding the former case, Averroes uses the term *ḥisba* to describe the determination of the “amount of bad (*sharr*)” that must be added to the written law.⁷³ The noun *ḥisba* comes from the verb *ḥasaba*, meaning “to calculate.”⁷⁴ So *ḥisba* might be said simply to designate the adjustment of the quantity of good and bad. But a fuller understanding of the word requires an appreciation of *ḥisba*’s meaning in Islamic law. The term *ḥisba* itself is not used in the Qur’ān but was often employed in Islamic tradition to denote a Muslim’s responsibility “to enjoin good and forbid evil.”⁷⁵ This dual call does feature prominently in the Qur’ān, as in the imperative that believers be “a community that calls for what is good, urges what is right, and forbids what is wrong: those who do this are the successful ones.”⁷⁶ Additionally, *ḥisba* is used to refer to the institution of public morality and the function of the *muḥtasib*, who oversees public moral behavior, particularly in the market.⁷⁷ Thus *ḥisba* is an appropriate word to use for cases where a harsh verdict is required for the sake of both justice and the welfare of the community. This is reflected in Averroes’ discussion of cases of injustice against sacred places of worship (*buyūt Allāh*), including burglarizing them, and attacks against virtuous people.⁷⁸ In such cases, Averroes argues that the offender would have committed an evil so egregious that there is no room for pardon or forgiveness.

As for the mitigation of harsh law, Averroes speaks of beneficence (*ḥilm*), a praiseworthy quality that went back to an old Arab virtue.⁷⁹ Averroes explains that it means forgiveness and toleration.⁸⁰ He offers the case of a ruler who declines to impose upon a thief the sanction that is decreed in Islamic law for theft. By abstaining from amputating a starving man’s hand for stealing food, the ruler exemplifies beneficence.⁸¹ This example recalls the third Islamic caliph, ‘Umar ibn al-Khaṭṭāb, who reportedly suspended physical punishment for theft during the time his community was struck by famine.⁸² Yet Averroes explains that such suspension cannot be used indiscriminately: “in fact, a person becomes forbearing only in things that are suitable to forgiveness.”⁸³ He has in mind the fact that those Islamic rulings known as *ḥudūd* were, in some

⁷³ *Paraph. Rhetoric* II.116–17 (§1.13.9).

⁷⁴ Ansari, “Hisba,” *El2*.

⁷⁵ *Ibid*.

⁷⁶ Qur’ān 3:104.

⁷⁷ Ansari, “Hisba,” *El2*.

⁷⁸ *Paraph. Rhetoric* II.121 (§1.14.3).

⁷⁹ Cf. Bosworth 1970: 28; Pellat, “Ḥilm,” *El2*.

⁸⁰ *Paraph. Rhetoric* II.116–17 (§1.13.9).

⁸¹ *Ibid.*, II.118 (§1.13.12).

⁸² This example is noted in Emon 2010: 34.

⁸³ *Paraph. Rhetoric* II.118 (§1.13.12).

instances, subject to correction.⁸⁴ With such concrete examples, he legitimizes the corrective function of the unwritten law.

Chapter 15 of *Paraph. Rhetoric* corroborates the need to consider both written and unwritten law in Islamic jurisprudence. Here Averroes argues that in certain circumstances, both written and unwritten laws can be disregarded when arriving at a judgment. In total, he provides eight arguments that can be used against the written law.⁸⁵ Again, Averroes draws on the persuasive capacity of Islamic legal precepts – in this case, the abstracted precepts that derive from rules of jurisprudence and which often serve to illustrate the objectives of the law (*maqāṣid al-sharīʿa*).⁸⁶ In one of the arguments against the written law, Averroes refers to the limitation (*mashaqqā*) of the written law, which unlike the unwritten law sometimes goes against the nature of people.⁸⁷ This resonates with a legal precept in Islamic jurisprudence, which states that “hardship begets facility (*al-mashaqqā tajlib al-taysīr*).”⁸⁸ This maxim, based on some Qurʾānic verses (Qurʾān 23:5, 22:78, 4:28) stating that God does not inflict hardships,⁸⁹ allowed for modifications to written law or religious duties on the basis of necessity, for example sickness or disability. This legal precept is often related to another maxim, which holds that “necessity makes the unlawful lawful.” In jurisprudence, this could mean granting a legal permission (*rukḥṣa*) for performing unlawful actions in case of need, such as drinking wine or eating the meat of animals that were not killed for food.⁹⁰

In a similar vein, Averroes provides five kinds of argument that can be used against the unwritten law and indicates how those arguments may draw on the same repertoire of legal precepts. The written law is prescribed by the lawgiver because of his knowledge of the public interest (*maṣāliḥ*).⁹¹ Using the metaphor of a doctor, Averroes explains that failing to follow the written law is like failing to follow a doctor's prescription, yet can be even more harmful. The notion that the law's purpose includes the avoidance of harm derives from a legal maxim that states, “let harm be neither suffered nor inflicted (*lā ḍarar wa-lā ḍirār*).”⁹² This precept was often used to convey that the purpose of Islamic law is to generate benefit to the

⁸⁴ For more on *ḥudūd* in Islamic law, see Rabb 2015.

⁸⁵ *Paraph. Rhetoric* II.124–27 (§§1.15.3–18).

⁸⁶ Kamali 2006: 77; for more on legal precepts, see Opwis 2010: 138–43.

⁸⁷ *Paraph. Rhetoric* II.125 (§1.15.7). ⁸⁸ Kamali 2006: 87–88.

⁸⁹ Qurʾān 23:5 (“God intends for you ease, and He does not want to make things difficult for you”); 22:78 (“and [He] has not laid upon in religion any hardship”); 4:28 (“God wishes to lighten [the burden] for you; and man was created weak”).

⁹⁰ *Abridgement*, at Averroes 1994a: 60. ⁹¹ *Paraph. Rhetoric* II.127 (§1.15.17).

⁹² Kamali 2006: 85.

community. As these points illustrate, Averroes frames legal precepts by abstracting from particular juridical cases. This allows him to relate the idea of the “objectives of the law” to the contrast between written and unwritten laws. He ties the Aristotelian concept of unwritten law to the juridical imperative to eliminate injustice, while being mindful of the inevitable contingency built into all concrete applications of the law.

Conclusion

By forging links between Aristotelian rhetoric and Islamic law in both his logical and legal writings, Averroes assesses the epistemology of Islamic jurisprudence under the argumentative framework of rhetoric and advances a pragmatic mechanism, which guarantees the rectification of laws to fulfill ethical justice. Legal reasoning reaches conclusions that share the probable epistemic status of assent induced by rhetorical argument, while Aristotle’s idea of an unwritten law is used to explain certain forms of legal reasoning and even to gesture toward a practical ethic of justice, which calls us to adapt legal decrees to changing circumstances.⁹³ More importantly, such reflection on the foundation of law in terms of both its sources and evolution puts on display a robust philosophy of law. This conclusion comes to challenge a dominant assumption, which often sets Averroes the philosopher at odds with both his profession as a jurist and his legal religious context. As seen earlier in his discussion of legal proofs, *tawātur* and *āḥād*, Averroes displayed a consistent position in both his philosophical and legal works. To skeptics who might argue that Averroes’ corrective view of law is only found in his philosophical treatise *Paraph. Rhetoric*, I will simply note that the tendencies explored in this chapter are also evident in Averroes’ other philosophical works such as his paraphrase of the *Nicomachean Ethics* and in his legal works, the *Jurist’s Primer* and the *Decisive Treatise*.⁹⁴ His sustained reflection on this topic exemplifies the fact that the *falāsifa* did make an effort to engage with their Islamic cultural context, rather than being estranged from it.

⁹³ For further study of this corrective view of law in Averroes, see Bouhafa 2016.

⁹⁴ *Jurist’s Primer* VI.238–39.

CHAPTER 5

*Averroes' Logic**

Paul Thom

Introduction

Averroes' writings on logic mostly take the form of commentaries on the logical works of Aristotle. We have his epitomes of Porphyry and of all the books of the *Organon* including the *Rhetoric* and *Poetics*,¹ his middle commentaries on all these books, and his long commentary on the *Posterior Analytics*. Besides these, several of the *Questions* (*maqālāt*, known in Latin as the *quaesita*)² are devoted to individual points in the *Categories*, the *Peri Hermeneias*, and the *Analytics*.³ This concentration on Aristotelian commentary reflects Averroes' view about the proper extent of logical study. In the preface to his epitomes of the *Organon* he says that the art of logic concerns two things, conception (*taṣawwur*) and assent (*taṣdīq*); on the basis of this duality, he divides the study of logic into a study of the various books of the *Organon*. Porphyry's *Eisagoge* and Aristotle's *Categories* give a generic treatment of conception, while the *De Interpretatione* and *Prior Analytics* deal with assent in general. The remaining books give treatments of conception and assent as appropriate to the specific logical arts: the *Posterior Analytics* for the demonstrative art, the *Topics* for dialectic, the *Sophistical Refutations* for the sophistical art, and the *Rhetoric* and *Poetics* for the arts after which they are named.

We know that Averroes' general approach in logical matters was to defend Aristotle against the innovations of Avicenna,⁴ and we have

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¹ See Butterworth 1997. ² Arabic text in *Questions on Logic*. See Di Giovanni 2017: 239–41.

³ Endress (1999: 367) observes that “a complete inventory, based on the mediaeval testimonia, and the extant Arabic, Hebrew, and Latin manuscripts, and verifying the identity of texts current under variant titles, remains to be established.”

⁴ Street 2015: §1.4.2.

philosophical studies on specific areas in Averroes' logic.⁵ But in the present state of knowledge it is not possible to form a comprehensive, in-depth view of Averroes' logical theories. I will attempt only a sketch of what is known of his approach to selected topics in the theory of conceptions (the logic of compound terms) and the theory of assent (the logic of per se propositions and of modal syllogisms).

Terms

A difficult passage in *De Interpretatione* asks under what conditions two separate predicates can be validly combined into a single compound predicate, and under what conditions a combined predicate can validly be separated out into its components. Aristotle says that "animal" and "biped" can be combined into a single predicate, as can "white" and "man," but "good" and "cobbler" cannot. If one of the components is implicit in the other, or if one is true of the subject incidentally rather than simpliciter (κατὰ συμβεβηκός vs. ἀπλῶς), then we cannot pass from the components to the combination. Conversely, whereas "white man" implies "white," "dead man" does not imply "man." If one of the components is true of the subject per accidens rather than per se (κατὰ συμβεβηκός vs. καθ' αὐτό), or if one implies the opposite of the other, then we cannot pass from the combination to the components.⁶ Commentators have struggled to make sense of this chapter. Ackrill, for instance, finds Aristotle's treatment "clearly unsatisfactory."⁷

Averroes devotes one of his *Questions* to the solution of this problem.⁸ He understands the Aristotelian text to say that two simple predicates sometimes combine to form a per se unity, and sometimes combine to form a per accidens unity. In the case of a per se unity, the compound term is predicable of all and only those subjects of which the component terms are predicable; "rational animal" is a per se combination, and accordingly there is no difficulty in inferring "It is rational" and "It is an animal" from

⁵ On the *Categories*, see Cerami 2013. On points in the syllogistic, see Rescher 1963; Elamrani-Jamal 1995; Thom 2003: chapter 5; Knuuttila 2012: 320–21; Thom 2016a: 296–98, 308–9; and Uckelman and Lagerlund 2016: 124–27. On the theory of demonstration, see Hasnawi and Hodges 2016: 55–56, and Cerami 2016a. On the *Topics*, see Hasnawi 2001. On the *Rhetoric* and *Poetics*, see Black 1990.

⁶ Aristotle, *De Interpretatione* 11, 20b31 and 21a18. ⁷ Ackrill in Aristotle 1963: 145.

⁸ Averroes, *Discussion of Simple and Compound Predicates and Refutation of Avicenna's Doctrine* (*al-Qawl fi l-Mahmūlāt al-mufrada wa-l-murakkaba wa-Nadq madhhab Ibn Sīnā*), Madrid, Escorial MS 632, fols. 137r–140v. Edition of the Arabic text in *Questions on Logic* 91; Latin trans. Abraham de Balme (*De praedicatis compositis et diuisis*) in Averroes 1962: 1/3, 75H–77H.

"It is a rational animal." In the case of a per accidens unity, the compound is not predicable of all, or is not predicable only of, those subjects of which the component terms are predicable; "skillful doctor" is a per accidens combination, so we cannot infer "She is a skillful doctor" from "She is skillful" and "She is a doctor." Equally, we cannot infer "The goat-stag is an existent" from "The goat-stag is an existent in the imagination."

Averroes poses the question whether in an inference from a compound term to one of its components, or vice versa, the component term has absolutely the same meaning in the premise and the conclusion, or an absolutely different meaning, or whether its meaning is neither absolutely the same nor absolutely different in its two occurrences. In posing this question he may have in mind al-Fārābī's commentary on the *De Interpretatione*, where it is noted that some commentators take Aristotle to be saying that the term has totally different meanings when combined and when uncombined.⁹ At any rate, Averroes rejects this view.

He also rejects the view that Aristotle is here laying down a rule that the term must have the same meaning in premise and conclusion. This was Avicenna's view. According to Avicenna, Aristotle was dealing with the logic of conjunctive terms; the logical rule governing such terms is clear, namely that a conjunct can always be correctly inferred from a conjunction so long as it has the same meaning when combined and when uncombined:

As for the example of "doctor" and "skillful" and "proficient," the truth requires that this be true separately and in combination. That is because, when "skillful" is predicated of Zayd, it is not predicated of him however chance has it. Rather "skillful" is being predicated of something obtaining in virtue of his being skillful at sewing. Again, when "proficient" is predicated of him, it is not being predicated of him however chance has it, but according to his being proficient at seeing. When it is like that, then, when the two predicates are combined, and mean in combining what they mean when separated, falsity does not occur.¹⁰

Having laid down the rule governing inferences to and from composite predications, Avicenna conjectures that in the passage under consideration Aristotle's point is that a false understanding comes about on account of usage, usage that is not connected with the nature of things:

The first teacher [Aristotle] comments on this tendency at the beginning of his instruction, while not commenting on [its] precise determination, since

⁹ Al-Fārābī 1981: 150.

¹⁰ Avicenna 2013: 101.1.

the investigation of that is troublesome for the beginner, [namely] to distinguish metaphorical custom from the purely literal. Nevertheless, neglecting to make apparent its condition makes him make a mistake. So he is warning of that and of following custom here.¹¹

Now, Averroes agrees with Avicenna's rule that if the components have the same sense taken in isolation and in combination, then there is a valid inference from a predication in which they are combined to a predication in which one of them occurs by itself. But he insists that this point is entirely distinct from what Aristotle is saying. He takes Aristotle to be saying that the relation between a component in a per accidens compound predicate and the same component when separated out (e.g. "skilled doctor," as opposed to "skilled") is a relation of secundum quid and simpliciter, not a relation of conjunction to conjunct. He states that "it escaped him [Avicenna] that there is no division there, but composition in potency."

According to Averroes' account, in order for two terms to form a per accidens unity, one of them must qualify the other; and in order for one of the components to qualify the other, it cannot retain exactly the same sense that it had when predicated by itself. It must undergo a semantic transformation. Thus, "skillful" in "skillful doctor" does not mean the same as it does when predicated by itself. In functioning as a qualification of "doctor" its meaning undergoes a change from connoting an unspecified skill to specifying the skills possessed only by doctors. Similarly:

Since it is true of the goat-stag that it is an existent in the imagination (*al-wahm*), it is obvious that when we make the statement about it absolute and say that it is an existent – and we have understood from the expression "existent" "existent in the imagination" – we have not yet made the move from taking it as a compound to taking it in isolation.¹²

In Averroes' view, in the context of *De Interp.* 11, the per accidens unity possessed by a compound predicate flows precisely from the *combination* of the two components. But the same account does not apply to terms forming a per se unity. The word "rational" does not change its meaning depending on whether it is or is not accompanied by the word "animal."

He argues that in an inference that complies with Avicenna's rule, the predicate's components in the premise do not form a unity, either per se or per accidens. If, in accordance with Avicenna's rule, the term "skillful" were to have the same sense in the statement "Nicomachus is a skillful

¹¹ Ibid., 126, modified.

¹² *Questions on Logic* 92.15–17. Translation by Tony Street.

doctor" as it has in the statement "Nicomachus is skillful," so that it qualifies Nicomachus himself and not his practice of medicine, then the inference "He is a skillful doctor, so he is skillful" would belong with inferences like "Socrates is white and is walking, therefore he is walking," where the component terms do not produce a unity at all, neither per se nor per accidens. Construed in that way, "skillful doctor" would not be a per accidens compound term, because it would lack the kind of semantic transformation that is characteristic of such terms. This kind of transformation, which to Avicenna is simply an impediment to the validity of the inference, Averroes regards as indispensable to the process whereby a per accidens compound predicate is formed. At the same time, "skillful doctor" construed à la Avicenna would not be a per se compound term, since it is clear that "skillful" is not a differentia of "doctor." Consequently, for Averroes, Avicenna's rule does not bear on the main question posed by Aristotle, namely the question of what makes for unity in a compound predicate.

Averroes thinks that anyone approaching the question in a suitably humble manner would find his reconstruction of Aristotle's thought persuasive. At the same time he is sure that Avicenna did not approach the question in this way:

What pushed the man to these kinds of errors is his high opinion of himself; had he only doubted himself a little, these things [i.e. these solutions] would have been apparent to him.¹³

Propositions

Averroes reads *Posterior Analytics* I.4 as stating the conditions that a proposition must satisfy in order to be necessary – one of these conditions being that the proposition is per se. In his *Long Commentary* he states that *Posterior Analytics* I.4 gives three conditions that a demonstrative premise must satisfy in order to be a necessary proposition.¹⁴ The first condition is that the predicate must be true of all of the subject. What is meant by "true of all" (de omni) in the *Posterior Analytics* is stronger than the sense defined at the start of the *Prior Analytics*:¹⁵ not only must there be none of the subject to which the predicate does not apply, but there must be no time at

¹³ Averroes, *Discourse on Compound and Simple Predicates*, at *Questions on Logic* 94. Translation by Tony Street.

¹⁴ *LC Posterior Analytics* 215.9–216.8.

¹⁵ Aristotle, *Prior Analytics* I.1, 24b28.

which the predication fails to hold. The second condition a proposition has to meet in order to be necessary is that the predication must be per se in one of the first two senses defined by Aristotle. In the first of those senses the predicate is the whole definition of the subject, is its genus or differentia, or is part of its genus or differentia; for example, the predication “Man is an animal” is per se₁ because “animal” is a genus of “man.” In the second sense of “per se” the subject enters into the definition of a predicate in the way in which a species enters into the definition of its proprium or a genus enters into the definition of one of its dividing differentiae; for example, the predications “What is capable of laughter is human” and “What is even is a number” are per se₂ because “capable of laughter” is a proprium of “human” and “even” is a dividing differentia of “number.”¹⁶ The third condition on a proposition’s necessity is that the predication must, in a special sense, be universal. What Aristotle means by this, says Averroes, is that the predicate belongs to the subject in virtue of the subject itself and not in virtue of some nature other than the subject. This third condition implies the first two but goes beyond them in requiring that the predication be primary, i.e. unmediated.

In his *Discussion of Assertoric or Absolute Premises* (*al-Qawl fī l-Muqaddima al-wujūdiyya aw al-muṭlaqa*),¹⁷ Averroes appears to give a different account of necessity, one that on the face of it is not restricted to per se predications. He classifies universal predications on the basis of the length of time for which they are true: (1a) perpetually, (1bi) for most of the time, (1bii) for half the time, (1biii) for a lesser part of the time, or (2) only at a future time.¹⁸ Inferences of type 1 he says hold in actuality, those of type 2 merely potentially. Thus he appears to be committed to a version of what Hintikka calls the “statistical interpretation” of modalities.¹⁹ However, we will see shortly that, despite appearances, Averroes is not committed to a strictly statistical interpretation.

Averroes holds that predications like “All ravens are black” fall short of genuine necessity, despite the fact that sense-perception provides no counterexample to them. As he says:

Of this sort are the premises which al-Fārābī calls “akin to the perfectly certain.” These are [assertions] which no sense-experience is found to

¹⁶ Cerami 2016a: 4.2. *LC Posterior Analytics* 221.17–222.11.

¹⁷ Averroes, *Discussion of Assertoric or Absolute Premises* (*al-Qawl fī l-Muqaddima al-wujūdiyya aw al-muṭlaqa*), Madrid, Escorial MS 632, fols. 113r–116v; published in *Questions on Logic* 114.5–116.12. Latin trans. Abraham de Balmes (*Quid sit propositio absoluta id est de inesse*) in Averroes 1962: I/3.78D–80F. Cf. Rescher 1963.

¹⁸ Rescher 1963: 87. ¹⁹ Hintikka 1973: 103.

contradict, and no [true] statement [whatever]. For the premises which are truly necessary are those in which the intellect apprehends the essential relationship between the predicate and the subject.²⁰

He continues:

These [quasi-necessary] premises are frequently also ones which enter into the sciences in syllogisms. As Aristotle says, they are composed of these.²¹

I take it that this reference is to *Posterior Analytics* I.30, 87b20, and II.12, 96a8, where Aristotle discusses demonstrations containing propositions that hold for the most part rather than necessarily.

Propositions like "All ravens are black" hold with perpetuity up to the present but not with strict perpetuity. Strict perpetuity is possessed only by premises that are genuinely necessary. Averroes thinks propositions like "All ravens are black" are not genuine necessities, even if they are sometimes described as such. The possibility of a future raven that is not black remains open. In general, when the intellect does not apprehend an essential relationship between predicate and subject, "this is when possibility enters into it . . . And if possibility enters into it, it is assertoric, and not necessary."²²

Such a possibility cannot be ruled out, because blackness is not part of the essence of ravens. Averroes understands Aristotle to have identified the genuinely necessary with the per se, actually referring this doctrine to the *Posterior Analytics*.²³ Since only per se inferences are apprehended by the intellect alone, it turns out that the account of necessity in the *Discussion of Assertoric or Absolute Premises* is not after all free of the restriction to per se predications, nor is it in an unqualified sense a version of the statistical interpretation of modalities. On the contrary, the statistical interpretation fits the quasi-necessities that Averroes opposes to what is genuinely necessary. Quasi-necessities are grounded in facts that quantify over times; genuine necessities are grounded in relations between essences.

Averroes sets his own account of necessity against what Avicenna says on the topic in the Logic section of the *Najāt*.²⁴ There, Avicenna distinguishes five types of necessary proposition, depending on whether the predicate applies to the subject (1) with unconditional necessity ("God is living"), (2) so long as the essence of the subject continues to exist ("Every man is by necessity an animal"), (3) so long as the subject continues to be

²⁰ Rescher 1963: 88–89. ²¹ Ibid., 89.

²² Ibid., 89. I have omitted Rescher's interpolated glosses.

²³ Ibid., 89; Aristotle, *Posterior Analytics* I 4, 74b5. ²⁴ Avicenna 2011: 48.

correctly described in the given way ("By necessity every white thing has a colour that dilates sight"), (4) for a definite or indefinite time ("By necessity the moon eclipses" or "By necessity every man breathes"),²⁵ or (5) so long as the predicate continues to apply to the subject ("By necessity Zayd is walking for as long as he is walking").²⁶

Averroes sees Avicenna's account of necessity as being confused, and he takes exception to the suggestion that "Man is an animal" is not perpetually true:

But all this is confusion and disorder. This is so because necessary universal premises do not require these conditions. This is because "Man is necessarily an animal" . . . never ceases to be so, equally whether every single man either exists necessarily and always, or not. The universals are existent and not perishable, I mean those of which a universal judgment is composed, like the statement: "Man is an animal."²⁷

On Averroes' understanding of necessity, a *de omni* and *per se* relation holds between "man" and "animal." Such a relation is necessary, independently of any question of the existence, let alone the necessary existence, of men or animals. If there are any men, the predication "Men are animals" will be true as a universal affirmation; but it is not the case that if the predication is necessary there must exist some men.

Averroes' argument can be put like this. Avicenna takes as his starting point a conception of necessity as what holds for all time. This is absolute necessity. Short of absolute necessity, something might hold for all of a specific time. This is necessity relativized to that specific time, whether it be the time during which the underlying subject exists, the time during which it falls under a given description, and so on. Thus there are grades of necessity: unrestricted necessity for unrestricted time, restricted necessities for various restricted times. On this conception, a statement of necessity might be construed as a categorical proposition that states about all or some *Bs* that they are *A* for so long as some condition holds.²⁸

Avicenna's view is open to the following line of objection. If an affirmative necessity makes a predication about some or all of the items falling under the subject term, then the statement will be true only for those periods during which there are such items. However, the necessity expressed by the modalized predicate will not be restricted to those periods of time; it will hold perpetually. The statement that every writer is

²⁵ In the *Najāt* these examples form two separate cases, making a total of six.

²⁶ Street 2013.

²⁷ Rescher 1963: 92. I have omitted Rescher's interpolated glosses.

²⁸ This construal is developed in Thom 2001.

necessarily moving, construed in this way, will be false during periods in which no one is writing; but the predicate "moving so long as writing" is true of all subjects at all times. There is a time-relativity in these statements, but it appears to affect the subject term, not the predicate. Avicenna, however, seems to want to shift this time-relativity onto the modality of the predicate.

Averroes thinks that Avicenna has made a serious mistake about the nature of necessity. The truth of a categorical predication is subject to various contingencies, but a statement's necessity is not subject to any contingency. Possibility does not enter into it. So a predication like "Man is an animal" should not be construed as being true only for a limited time, subject to the continued existence of men. The same is true of "God is living," "Every white thing has a color that dilates sight," and the rest. A statement's necessity is grounded in a perpetual relationship between universals – between *God* and *living*, between *white* and *dilating sight*, and so on.²⁹

In another of the *Questions*, the *Treatise on the Signification of "Predicated of Everything"* (*Maqāla fī Ma'nā ma'qūl 'alā l-kull*, dated 1195),³⁰ Averroes divides terms into those that are necessary (*ḍarūrī*) and those that are assertoric (*wujūdī*). He explains that a necessary term is one that possesses per se unity, i.e. "a term which is composed from a subject and an essential predicate (*maḥmūl jawharī*) of that subject, or from a subject and an inherent accident implied (*'arad lāzim*) by that subject." He gives the examples "animal" and "body." Another example would be "capable of laughter," which is a proprium of the subject "man." Contrasted with necessary terms are assertoric terms. An assertoric term is composed from a denomination that sometimes inheres in what is denominated and is sometimes absent from it. He gives the examples of "walking," "moving," and "writing." He clearly intends necessary and assertoric terms to be mutually exclusive classes.

With these notions in mind, Averroes divides categorical propositions into three types. Type 1 propositions are composed of two necessary terms; these are necessary propositions. Type 2 propositions are composed of two assertoric terms; these are assertoric propositions. His example of a type 2 proposition is "Everything walking is moving." Type 3 propositions have

²⁹ See Thom 2016b: 100–101, where Averroes' critique of Avicenna is shown to have a bearing on some modern formalisations of Avicenna's modal logic.

³⁰ *Question 7*, Escorial MS 632, 102r–113r; *Questions on Logic* 152–75. Latin trans. Abraham de Balmes (*De omni, de inesse et de missione*) in Averroes 1962: 1/3.811–87F. See the discussion in Elamrani-Jamal 1995: 71–74. See also Thom 2003: 81–86.

a necessary term for predicate and an assertoric term for subject; these are of a mixed nature, being in one respect necessary and in another respect assertoric – as Averroes puts it, they are per se assertoric and per accidens necessary. His example of type 3 is “Everything walking is an animal.”

Propositions of all three types are de omni in the sense that there is no time at which something falls under the subject but does not fall under the predicate. Type 1 propositions satisfy the additional condition that both the subject and the predicate possess per se unity: they are per se necessities. Type 2 propositions are such that neither the subject nor the predicate possesses per se unity: they are merely de omni. Type 3 propositions are not per se necessities, because the subject lacks per se unity; but neither are they merely de omni, because the predicate possesses per se unity.

The exhaustiveness of Averroes’ classification might be called into question on the ground that there are propositions having a necessary subject and an assertoric predicate. Averroes himself mentions this difficulty. In responding to it, he says that these propositions are just assertoric and (unlike type 3 propositions) do not have the status of being necessary per accidens. He has in mind propositions like “All animals are moving.” Such propositions, he says, are temporal assertorics whose predicate holds of the subject only for a certain time. He reminds us that Aristotle says that syllogisms in the arts are not composed of such propositions, and Averroes states that there is no syllogism from such an assertoric combined with a contingency premise. The reference to Aristotle is to *Prior Analytics* I.15, 34b7, where Aristotle declares that a first figure syllogism with assertoric major and contingency minor is invalid if the assertoric concerns a restricted period of time, and adds that syllogisms are produced by means of premises that are free of temporal restrictions. The propositions under consideration do not call into question the exhaustiveness of Averroes’ classification, because they are not de omni, whereas Averroes is clearly classifying de omni propositions, i.e. propositions that, if true at all, are true for all time; if he were not doing so, his classification would have to include propositions like “All animals are men,” which might be true for a limited time. Also excluded from his classification are propositions like “All ravens are black.” As we have seen, Averroes thinks such propositions are not strictly de omni.

There are other propositions with a necessary subject and assertoric predicate, namely, where the predicate is an implicate of the subject. But these are de omni, and they are already included in type 1. So they do not call into question the exhaustiveness of Averroes’ classification.

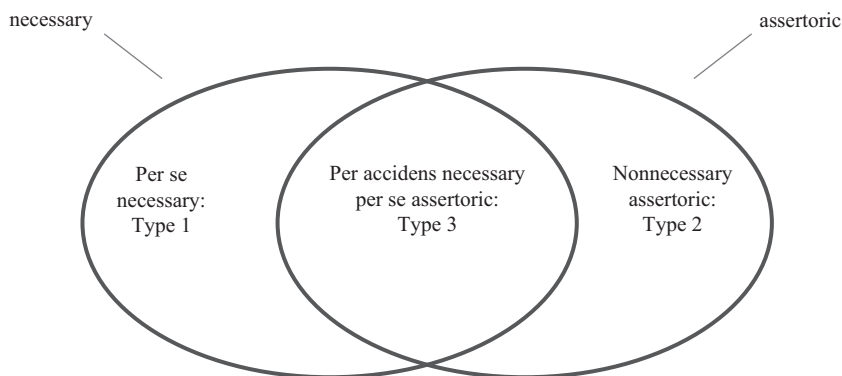


Figure 5.1 Necessary and assertoric propositions.

Finally, let us note that, while types 1, 2, and 3 form three mutually exclusive classes, Averroes also sees them as constituting two overlapping classes – the necessary (whether per se necessary or per accidens necessary) and the assertoric (including the nonnecessary as well as the assertoric that is per accidens necessary), as shown in Figure 5.1. The intersection of these two classes is made up of propositions like “Everything walking is an animal” that are necessary in respect of their predicates but assertoric in respect of their subjects.

This perspective on the classification will be important for Averroes' account of modal syllogisms.

Syllogisms

Figure 5.2 shows the structure of a first-figure syllogism that predicates *A* of *B* and *B* of *C*, and on this basis concludes that *A* is predicated of *C*. *B* is known as the middle term. The *AB* premise is known as the major, the *BC* premise as the minor. According to Aristotle's rules, an *AC* proposition can be validly concluded from the *AB* and *BC* premises only if the major premise is universal (“*A* is predicated of all, or of no, *B*”) and the minor affirmative (“*B* is predicated of all, or of some, *C*”). According to Aristotle, if these conditions are met, then the conclusion will be necessary only if the major premise is necessary.³¹

The interpretive and theoretical problem here is to find a way of understanding “necessary” and “assertoric” according to which Aristotle's results

³¹ Aristotle, *Prior Analytics* I.59, 30a15.

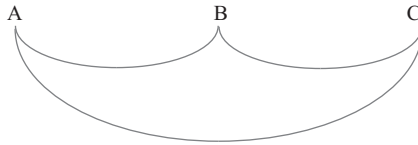


Figure 5.2 First-figure syllogism.

would be correct, and which can plausibly be attributed to Aristotle. Averroes proposed different solutions to this problem at different stages in his life, and Elamrani Jamal has traced the evolution of those views.³² My purpose here is to expound and defend Averroes' last solution to the problem as given in his *Treatise on the Signification of "Predicated of Everything."*

Averroes' interpretation is based on his threefold division of propositions, and hence on his notion of a term's per se unity:³³

You should know that assertoric propositions have assertoric terms, necessary propositions necessary terms . . . By "necessary term" I mean that the term is one per se, and these propositions are composed of a subject and an essential predicate (*mahmūl jawharī*) of that subject, or of a subject and an inseparable accident (*'arad lāzim*) belonging to that subject.³⁴

Averroes deploys this account of necessary and assertoric propositions in defense of Aristotle's claim. He argues that the conclusion must be necessary when the major is necessary and the minor assertoric, but need not be necessary when the major is assertoric and the minor necessary. As can be seen from Figure 5.1, assertoric propositions are of type 2 or type 3; necessary propositions are of type 1 or type 3. Therefore, there are four possible combinations of an assertoric major premise and a necessary minor premise, as shown in Table 5.1.

None of these combinations makes for a first-figure syllogism. In all cases the predicate of the minor is a necessary term and the subject of the major is assertoric. So, since no necessary term is assertoric, the predicate of the minor cannot be the subject of the major. All of these combinations therefore lack a middle term.

The combination of a necessary major and an assertoric minor premise must take one of the forms shown in Table 5.2. Cases 5 and 8 do not make for a first-figure syllogism because the predicate of the minor has a different status from the subject of the major (in case 5 the predicate of the minor is

³² Elamrani-Jamal 1995: 63–71.

³³ Text 7 in *Questions on Logic*.

³⁴ Translation by Tony Street.

Table 5.1 *First-figure combinations of an assertoric major and a necessary minor according to Averroes' typology*

Case	Major premise	Minor premise
1	Type 2	Type 1
2	Type 2	Type 3
3	Type 3	Type 1
4	Type 3	Type 3

Table 5.2 *First-figure combinations of a necessary major and an assertoric minor according to Averroes' typology*

Case	Major premise	Minor premise
5	Type 1	Type 2
6	Type 1	Type 3
7	Type 3	Type 2
8	Type 3	Type 3

Table 5.3 *Cases where a necessary conclusion follows from a necessary major and an assertoric minor*

	Case 6	Case 7
Necessary major	Every man is an animal (type 1)	Everything moving is an animal (type 3)
Assertoric minor	Every writer is a man (type 3)	Every writer is moving (type 2)
Necessary conclusion	Every writer is an animal (type 3)	Every writer is an animal (type 3)

assertoric and the subject of the major necessary, while in case 8 the situation is reversed). Cases 6 and 7 form first-figure syllogisms (in case 6 the term shared between the premises is necessary, while in case 7 it is assertoric). In both cases the conclusion must be necessary; specifically, the conclusion must be of type 3. (No inference yields a necessary conclusion of type 1.) Examples of both types are shown in Table 5.3.

Thus, every first-figure combination of a necessary major (of either of Averroes' types) and an assertoric minor (of either of Averroes' types) implies a necessary conclusion (of one of Averroes' types). By contrast, there are first-figure combinations of an assertoric major (of one of Averroes' types)

and a necessary minor (of one of Averroes' types) that do not imply a necessary conclusion (of either of Averroes' types) – for example, when all three terms are assertoric. This is Averroes' defense of Aristotle's doctrine. The defense relies on the double aspect of type 3 propositions.

To some critics it has seemed that there is a sleight of hand in this solution. As can be seen in Table 5.3, in case 6, a type 3 proposition is counted as assertoric in the minor premise, but such a proposition is counted as necessary in the conclusion. Gersonides (1288–1344) rejected Averroes' solution, declaring that "it is utterly implausible" that the same form of proposition should be regarded as assertoric when it is the major and necessary when it is the conclusion.³⁵ In Averroes' defense, it can be pointed out that he is saying that type 3 propositions are truly necessary and truly assertoric; in the minor premise of case 6 what he appeals to is the fact that a type 3 proposition is assertoric, and in the conclusion he appeals to the fact that such a proposition is necessary. Both are facts. A proposition that is per accidens necessary and per se assertoric is also necessary (i.e. necessary either per se or per accidens). This state of affairs is reflected in Figure 5.1, where any point within the overlap between the two ovals is also a point within the left oval.

It might be objected to Averroes' interpretation that it validates too many inferences. For example, Averroes chooses to describe case 7 (a type 3 major with a type 2 minor) as combining a necessary major and an assertoric minor; but, because of the double aspect of type 3 propositions, the case can equally well be described as having two assertoric premises, and under this description it is a case in which two assertoric premises lead to a necessary conclusion – contrary to Aristotle's rule that a necessary conclusion requires at least one necessary premise.³⁶ In reply, it can be pointed out that the objection only shows that there is a case in which a valid inference has two assertoric premises and a necessary conclusion. The existence of one such case does not show that *whenever* an inference has two assertoric premises it must have a necessary conclusion. It appears that Averroes' defense of Aristotle on first-figure mixed modal syllogisms can resist this objection.

Conclusions

Our consideration of this selection of Averroes' writings on the logic of conception and the logic of assent suggests several conclusions.

³⁵ Manekin 1992: 309.

³⁶ *Prior Analytics* I.12, 32a10–12.

In his role as an interpreter, Averroes sees himself as preserving and continuing the Aristotelian tradition. His main motivation is to get to the heart of the Aristotelian texts as he received them in Arabic translation. In order to do so he draws on material from different sources, using concepts from elsewhere in Aristotle or material of his own invention as a framework within which to make philosophical sense of the texts. He displays a concern with the overall intent of the text he is reading and its broader context, as is shown by his reading of *De Interpretatione* 11. His interpretive practice exhibits considerable intellectual creativity, as is clear in his systematic treatment of mixed modal syllogisms. He draws on the insights of earlier interpreters (as we saw in his appropriation of al-Fārābī's idea of premises that are "akin to the perfectly certain"), but he also savors any opportunity to expose the error and folly of his predecessors, especially in the case of Avicenna.

As an original logician, his account of necessity, while not itself a "statistical" one, nevertheless contains elements that when detached can serve as the foundation of a "statistical" interpretation of the modalities. His work on the character of the terms in modal predications constitutes an important step in the history of essentialist construals of modality and anticipates the work of Marko Malink.³⁷ His confrontation with Avicenna on the nature of simple and compound predicates is driven by a refusal to restrict logical theory to the investigation of terms having fixed meanings. He does not think this is the way Aristotle did logic, and he does not think it is the way logic should be done: in his view, the proper discussion of simple and compound predicates requires a sensitivity to the variability of meanings in different contexts. His critique of Avicenna on necessity raises fundamental questions about the way necessary propositions should be understood. And his view that certain types of proposition have a double aspect, as either necessary or assertoric, exhibits his subtlety as a logician.

Averroes' logical writings were studied and further developed by Gersonides³⁸ and gained widespread prominence in the work of Renaissance scholars such as Agostino Nifo (ca. 1473 – ca. 1538).³⁹ But the modern study of Averroes' logic is in its infancy. In this respect, Averroes' logic stands in sharp contrast with that of Avicenna and with Averroes' non-logical works. I hope that the present study has shown that Averroes' logical writings warrant close study. It remains for future scholarship to extend and deepen our understanding of these writings.

³⁷ See Malink 2013.

³⁸ See Manekin 1992.

³⁹ Nifo 1554.

CHAPTER 6

*Constructing Averroes' Epistemology**

Deborah L. Black

While medieval Islamic philosophers, like their Western counterparts, did not recognize a distinct area of philosophical inquiry under the rubric of epistemology, epistemological speculation was unusually predominant in classical Arabic philosophy from the time of al-Fārābī onward, and there are many new and original epistemological insights in the works of al-Fārābī and Avicenna.¹ The same is also true in the case of Averroes: despite the Commentator's deep commitment to upholding the fundamentals of Aristotle's philosophy, one can still discern a distinctive Averroist epistemology underpinning his accounts of the principles of knowledge and the way in which they offer justification for the conclusions derived from them. That distinctive approach also gives us some insight into why Averroes parts company with his Islamic predecessors in his evaluation of the epistemic merits of various types of knowledge. I am going to consider three main topics in the present study, all of which highlight Averroes' ambivalent attitude toward some of the main epistemological innovations of his predecessors: (1) Averroes' rejection of the distinction between primary and empirical propositions, (2) his "social epistemology" as manifested in his account of testimony, and (3) his rejection of the possibility of mediated intuitive knowledge (*ḥads*), on which Avicenna based his rationalized account of prophetic cognition.

Primary Intelligibles and Empirical Propositions

In the earliest of his three commentaries on the *Posterior Analytics*, Averroes relies heavily on the epistemological framework established by

* This research was supported by the Social Sciences and Humanities Research Council of Canada.

¹ In this chapter I limit my discussion to epistemology in the contemporary sense, that is, theories about the conditions under which we are justified in making knowledge claims.

al-Fārābī in his *Book of Demonstration* (*Kitāb al-Burhān*).² In particular, Averroes follows al-Fārābī in loosening the traditional link between necessity and knowledge through his recognition of nonnecessary forms of certitude:

Absolute certainty (*al-yaqīn 'alā l-iṭlaq*) is to believe that the true thing (*al-shay' al-ṣādiq*) – namely, that whose existence in the mind (*wujūduhu fī l-dhihn*) is the same as it is outside the mind (*'alā mā huwa khārij al-dhihn*) – cannot possibly exist in a manner different from the way we believe it to exist . . . And certainty that is of this description (*ṣifa*) is either necessary (*ḍarūrī*) or nonnecessary. It is necessary when we believe that the certainty we have defined cannot be different from what we believe, not even at any time. It is nonnecessary when it is certain only at a particular moment. These necessary premises are parts of demonstrative syllogisms since they are universal, unchanging, and not such as to pass away.³

Following al-Fārābī's lead, Averroes here allows contingent truths to be knowable with absolute or unqualified certainty, although he immediately proceeds to restrict the principles of demonstrative science to the realm of the necessarily certain. Such necessary principles are the "primary intelligibles" (*al-ma'qūlāt al-uwal*), and their principal characteristic is to be "known in themselves and from the beginning (*ma'lūma bi-naṣihā wa-min auwal al-amr*)." Averroes proceeds to subdivide the primary propositions into empirical and nonempirical varieties in keeping with al-Fārābī's practice. Averroes has no standard label for the nonempirical primaries: he simply describes them as "arising by nature" (*al-ḥāṣil bi-l-ṭibā*), giving the conventional example of "the whole is greater than the part." I will take my cue from this description and label them as "natural primaries." Averroes also adopts the standard account of his predecessors regarding the quasi-innate "feel" of such propositions, according to which we are not aware of "when or how they were acquired."⁴ Yet in spite of his initial acceptance of

² I am grateful to Charles Butterworth for allowing me to use a draft of his forthcoming edition and translation of Averroes' *Ep. Posterior Analytics*, which I have cited by paragraph number. I have also consulted the only other available version, the Renaissance Latin edition of 1562 reprinted in Averroes 1962, but my translations are based on Butterworth unless otherwise noted.

³ *Ep. Posterior Analytics* §2. In the ellipsis Averroes repeats al-Fārābī's appeal to what is now called a "KK" condition, according to which certitude also requires one to "know that one knows." For the Fārābīan background, see al-Fārābī 1986–87: 20–22, trans. in McGinnis and Reisman 2007: 63–65; Black 2006.

⁴ *Ep. Posterior Analytics* §7. The hallmark of our being unaware of when we have acquired primary propositions can be traced back to al-Fārābī and is also used by Avicenna. See al-Fārābī 1986–87: 23; trans. in McGinnis and Reisman 2007: 66; Avicenna 1985: 101; English at Avicenna 2011: 95. Averroes also refers to this criterion in his *LC On the Soul*, where he differentiates between intelligibles acquired "naturally" (*naturaliter*) rather than "voluntarily" (*voluntarie*) in reference to

the standard division of primary propositions into empirical and non-empirical varieties, Averroes' subsequent discussion seems to obliterate any robust distinction between the two. As Averroes explains in his early *Ep. On the Soul*, the natural primaries that arise in us unconsciously must ultimately have an empirical origin as well. Evoking as evidence the fact that a defect in one's sensory apparatus will impede the grasp of the corresponding intelligibles, Averroes appeals to the basic Aristotelian dictum that all intelligibles must be acquired through sensation and imagination. While this is most evident in the case of empirical propositions, insofar as empiricals are composed from intelligibles they exemplify the essential properties characteristic of the intelligible as such. Thus Averroes notes that even if we do not have any conscious memory of how we acquired the natural primaries, they too must have a sensory origin:

Whenever one considers how the intelligibles arise in us, and especially the intelligibles from which empirical premises are composed, it is clear that in order for them to arise in us we must first sense and then imagine [the object], after which we will be able to grasp the universal. For this reason anyone who is lacking in one of the types of sensibles is lacking in some intelligible . . . Likewise it is likely that this is the state of the other type of intelligibles of which we are not aware when they arise nor how they arise [i.e., the natural primaries]. But since their individuals are apprehended by us from the beginning, we do not remember when this state of theirs, which takes hold of us through experience, took hold of us. This is self-evident, for these intelligibles are not another genus of intelligibles different from the empirical ones, and for this reason it is necessary that the way they come about in us should in some way be the same.⁵

That Averroes refuses to draw any essential distinction between the natural and empirical primaries may also help to explain another distinctive feature of his epistemology, namely, a broad construal of "experience" (*tajriba*) according to which *any* universal proposition whose certitude depends on "our scrutiny" (*'inda taṣaffuḥinā*) of particulars counts as empirical – including even some mathematical truths whose empirical character is not immediately obvious:

What arises by experience is that about which certainty of the universal in it arises upon our scrutiny of [1] some of its particulars (*ba'd juz'iyyātihā*), for instance that scammony purges only bile; or [2] most of its particulars, for

the conscious effort we make to acquire empirical primaries. See *LC On the Soul* 496 (Bk. 3, comm. 36); English at Averroes 2009: 396; cf. *LC On the Soul* 506–7 (Bk. 3, comm. 39); English at Averroes 2009: 405.

⁵ *Ep. On the Soul* 79.

instance, that everything that has a fragrance has a certain taste; or [3] only one of its particulars (*wāḥid minhā faqat*), for instance, that every number is half of its two bordering [numbers] (*ḥāshiyatayihī*). The cause of these divisions is for the most part the differences of their matters.⁶

Averroes begins his account of the nature of experience with the standard example, ubiquitous in Avicenna, of the discovery of the purgative power of scammony.⁷ But unlike Avicenna, he does not limit experience to the obvious cases in which we acquire a universal, certain judgment from the examination of all or most particulars within a given species. Instead, just as Averroes collapses the distinction between natural and empirical primaries, he also includes among empirical propositions basic sensory judgments and, more surprisingly, cases where a single case is needed to produce certain assent. While this tripartite division of experience initially appears to be based on the number of particulars that must be scrutinized, Averroes cannot mean for the frequency of observation alone to serve as a criterion for empirical knowledge, as is clear from his allusion to cases where assent supervenes on our grasp all or most of the particulars. For example, Averroes surely does not mean that only after we have tasted all possible cups of coffee are we able to recognize that this particular aroma will have the taste of coffee. His point must instead be that almost every time we encounter a cup of coffee, we will experience these conjoined olfactory and gustatory properties. By contrast, the curative properties of scammony are hidden and made evident only under certain conditions, i.e., when the plant is given to a patient suffering from the relevant malady for which it is a cure.⁸

Averroes himself appeals to the differences in the matters (*ikhtilāf al-mawādd*) of the experienced objects in order to explain the variation in the number of particular instances needed to produce assent. By this he seems to mean that the more abstract or immaterial the intelligible in question, the fewer instances are required in order for certitude concerning its necessity to arise. The most abstract mathematical universals are such

⁶ *Ep. Posterior Analytics* §7. The same division recurs in the late *LC Posterior Analytics*, at Averroes 1962: 1/2.563E–564A (Bk. 2, comm. 104, on Aristotle's *Posterior Analytics* II.19).

⁷ For Avicenna's fullest discussion of experience, see Avicenna 1956: 93–98; English at McGinnis and Reisman 2007: 147–52. The scammony-bile example is Avicenna's standard illustration of an empirical premise, e.g., Avicenna 2011: 88. For discussions of Avicenna on experience, see McGinnis 2003; Janssens 2004; Gutas 2012; Black 2013.

⁸ In *Ep. Topics* 157 (§10; English at Averroes 1977: 50) Averroes makes a similar point regarding empirical premises, noting that we need induction to reach essential predicates in cases where “none of those individual cases has happened as yet to be perceived,” and giving the scammony-bile example.

that we may be able to grasp them by entertaining just one example.⁹ If I am able consider the equation $3 = (2 + 4) \div 2$ and immediately recognize it as an instance of a general mathematical truth without having to be shown that this general truth also holds for 4, 5, 6, and so on, then that is still a form of experience on Averroes' view, since assent to any proposition that follows the observation of an exemplary particular counts as "empirical," even if that judgment supervenes on a single instance.¹⁰ Such a view seems, however, to strain the notion of "experience" even within Averroes' own tradition, and a comparison between Averroes' view of empirical and mathematical primaries with that of Avicenna is instructive on this point.

In sharp contrast to Averroes, Avicenna treats empirical propositions, such as "scammony purges bile," as a category of scientific principles distinct from basic mathematical truths. For Avicenna experience involves the intellect recognizing a necessary connection between a cause and its effect (such as scammony and purgation) on the basis of repeated observation combined with the recognition that "chance is not always or for the most part," on the basis of which the intellect constructs a latent or unconscious syllogism that the effect, purgation, is an essential consequence of the cause, scammony.¹¹ The appeal to a latent syllogism is a characteristic feature of Avicenna's many accounts of the principles of knowledge, and Avicenna recognizes something akin to a hidden syllogism in the case of mathematical principles as well. Yet Avicenna refuses to assimilate basic arithmetical propositions to either empirical propositions or purely self-evident truths. Instead, he posits a separate category of premises whose syllogisms and their middle terms are innate in the mind (*muqaddimāt fiṭriyya al-qiyyāsāt*). Avicenna's examples of this type of proposition are usually simple arithmetic operations that most people will perform automatically, such as "two is half of four." On Avicenna's reckoning, such propositions cannot be pure primaries, that is, immediate self-evident truths, since there *is* a middle term uniting the subject and predicate, and so an inference or calculation is involved in assenting to them, although it is performed unconsciously. Yet Avicenna does not

⁹ Cf. *Ep. Topics* 157 (§11; English at Averroes 1977: 50), where Averroes notes that one individual (*shakhṣ wāhid*) suffices for grasping arithmetical premises (*al-muqaddima al-'adadiyya*).

¹⁰ Some interpreters of Aristotle, most notably Kurt Von Fritz, have upheld the possibility of one-instance *inductions* in the case of mathematical propositions, and since Averroes does not make sharp distinctions between induction and experience the way al-Fārābī and Avicenna do, this seems tantamount to the same claim. Lameer (1994: 136) cites Von Fritz as background to al-Fārābī's discussion of induction, although the explicit textual warrant for this in Aristotle is unclear.

¹¹ Avicenna 1956: 97; English at McGinnis and Reisman 2007: 149 (§10). See also the texts and scholarship cited earlier at note 6.

think that these kinds of propositions can be simply empirical either, since the mind does not have to *discover* the middle term through sensory observation the way it must in the scammony-purgation case. Instead, even though the extreme terms are neither partly nor wholly identical with one another, they are such that *as soon as* the mind grasps them, it immediately conceives the middle term that connects them as well.¹²

Averroes' main reason for rejecting an account such as Avicenna's seems to be that it depends on the possibility of the mind making inferences unconsciously. Whereas unconscious inferences are lurking everywhere in Avicenna's account of epistemic principles, Averroes seems determined to wipe out all appeals to hidden inferential operations. Averroes is explicit on this point in his earliest accounts of testimony, as we will see shortly, but it also seems to underlie his rejection of the distinction between experience and induction (*al-istiqrā'*) upheld by both al-Fārābī and Avicenna.¹³ As understood by Averroes' predecessors, induction is a mental operation that remains on the level of particulars and in effect provides nothing more than a summary account of one's prior observations.¹⁴ Experience, by contrast, is able to reach the level of the universal and recognize an essential connection between a subject and a predicate (e.g., scammony and the purgation of bile), thereby conferring certitude that the observed connection obtains in all possible and unobserved particulars. How experience enables us to do this while induction does not is not spelled out by al-Fārābī, but Avicenna appeals to the hidden syllogism as the missing ingredient that can raise empiricals to the level of necessary intelligible truths.¹⁵

¹² See Avicenna 1956: 64; Avicenna 1984b: 121.

¹³ See al-Fārābī 1986–87: 24–25; English at McGinnis and Reisman 2007: 67 (§4); Avicenna 1956: 95–96; English at McGinnis and Reisman 2007: 149ff. (§§9ff.). For a comprehensive discussion of Averroes' views on experience and induction in Averroes' *LC Posterior Analytics*, see Cerami 2015b. Since *Posterior Analytics* II 19 suggests that induction and experience are parts of the same process for acquiring universal knowledge, Averroes' silence here may indicate a desire to remain more faithful to Aristotle's text.

¹⁴ Avicenna (1956: I.7.98) admits that induction may reach the universal, though if it does so it will only produce a probable opinion.

¹⁵ As Avicenna says (1985: 98), the hidden syllogism in experience allows the mind to affirm "that it is of the nature (*min sha'niha*) of scammony to purge bile when it is given to drink." Gutas (2012: 400) gives a different rendering of the hidden syllogism: "[Minor] Scammony has by nature the power to purge; [Major] whatever has by nature the power to purge causes purging when ingested; [Conclusion] therefore scammony by nature causes purging when ingested." Yet this reconstruction does not seem to explain the formation of the empirical premise itself. What is at stake is not the connection between purgation and ingesting but, rather, the recognition that scammony is *essentially* purgative when ingested (i.e., ingestion is part of the predicate being affirmed). The syllogism is formed when the mind unconsciously applies the major premise that rules out a chance association, namely, "were this only coincidental and not something necessitated by its nature, then

From what we have already seen regarding Averroes' account of one-instance empiricals, it is not surprising that he would reject a conception of experience that would differentiate it from induction in this fashion. If there is an actual inference at work in such cases, then that would be tantamount to acknowledging that propositions known in this way are simply not primaries but syllogistic conclusions. Conversely, if the inference in question requires an appeal to the acceptance of propositions that are merely latent in the mind, then such propositions cannot be explanatory of one's certitude: actual effects are explained by actual causes, not potential ones.¹⁶ Averroes explicitly makes just this point in commenting on al-Ghazālī's Avicennian appeal to hidden premises in his defense of testimony:

But al-Ghazālī grants that these two premises are not formed in the mind in actuality at all, nor does a human being need to have the two of them present when assent to the continuous tradition (*al-tawātur*) occurs. And since he posits this concerning what is without doubt observed from the nature of continuous tradition, it is proof that these two premises have no utility in causing the certitude to occur, because what is not existent in the soul in actuality is not a cause for the existence of what is in it in potency so as to make it emerge into actuality.¹⁷

Even if we sympathize with Averroes' reservations regarding hidden syllogisms, he fails to address Avicenna's principal motivation for positing them as explanatory mechanisms. On Avicenna's account, empirical propositions, like simple arithmetical truths, are not immediate, and thus they cannot be primary propositions in the formal sense. There *is* a middle term that explains why scammony is an effective purgative, although experience alone does not provide us with anything other than the assurance that this is an essential property of scammony, and not just the product of chance. It is not clear whether Averroes would agree that this is the case: it seems

it would not exist for the most part without variation." This yields the empirical premise that "Scammony purges bile essentially." In other words, the hidden syllogism does not add any *content* to the experience; it merely explains why we assent to it as an essential and necessary truth.

¹⁶ As we have already seen, Averroes does not reject all appeals to unconscious mental processes, since he accepts the Fārābīan principle that we have no conscious awareness of how the natural primaries arise in us. But ratiocination is not this kind of process – the products of inferences are *voluntary* intelligibles acquired intentionally (cf. note 4). Moreover, while Averroes does not make this point explicitly, the hidden syllogisms to which Avicenna and al-Ghazālī appeal seem to be enthymemes, which both Averroes and his predecessors assign to the realm of rhetorical assent. So one might argue that this undermines Avicenna's ultimate aim of rescuing empirical and testimonial propositions as demonstrative principles.

¹⁷ *Abridgement* 176–77. I am grateful to Ziad Bou Akl for drawing my attention to the discussion of testimony in this text.

more likely that Averroes takes all primary propositions to be both empirical and immediate inasmuch as they are "known per se" (*ma'lūma bi-naḥsihā*). And if that is Averroes' meaning, then one needs no hidden syllogism to reach universal certitude. On his view, that is just what the intellect does naturally when presented with the appropriate sensory information. Averroes suggests as much in the continuation of the *Abridgement* passage cited above, where he evokes the Fārābīan formula for the unconscious acquisition of primaries as the alternative mechanism to al-Ghazālī's hidden syllogism: "This is the reason why we stipulate, in the definition of testimony, 'without our knowing how it arose nor whence it arose.'" In the case of abstract arithmetic propositions, the alternative to an implicit act of calculation is thus the simple recognition of a rule by "observing" it in one set of numbers that exemplifies it, although what we are "observing" is at a very high level of abstraction. In the more familiar scammony case, Averroes' position would rest on the claim that being purgative of bile is part of what it means to be scammony – just as he famously argues in the *Incoherence of the Incoherence* that the ability to burn cotton on contact is part of what it means to be fire, and anything lacking this property would not be worthy of the name "fire."¹⁸

Testimonial Knowledge: Averroes' Social Epistemology

In his account of testimony, like his account of primary propositions, Averroes is much closer to al-Fārābī than to Avicenna. He agrees with al-Fārābī that "testimony" (*al-shahāda*) is the source for the principles of both dialectic and rhetoric and that while testimony may on occasion be accidentally certain, it can never produce absolute certainty. Unlike Avicenna, who includes one form of testimony, *tawātur* or "continuous tradition," among the principles of demonstration, neither Averroes nor al-Fārābī allows for any type of testimony to yield certain knowledge.¹⁹

This general appraisal of testimony is spelled out in the greatest detail in Averroes' early *Ep. Rhetoric*, but Averroes continues to uphold this view in

¹⁸ *Incoherence of the Incoherence*, 17th Discussion; English at Averroes 1954b: 318–21, 30–31.

¹⁹ *Tawātur* is the term used in Islamic law for a tradition (*ḥadīth*) concerning Muḥammad that is transmitted by a unanimous and unbroken chain of testimony leading back to the original reporter. For al-Fārābī's assessment of testimony, see al-Fārābī 1986–87: 21; English at McGinnis and Reisman 2007: 64–65 (§6). For Avicenna's inclusion of *tawātur* among the sources of certitude, see Avicenna 1892: 57; 1984b: 122. Avicenna treats propositions derived from *tawātur* as akin to empiricals, since they too rely on a hidden syllogism that is the real cause of certitude. In this case the latent major premise is something to the effect that it is impossible for all these witnesses to be mistaken or colluding – a sort of anti-conspiracy principle.

his *LC Posterior Analytics*, where he identifies testimony as the measure of all commonly accepted premises (*al-mashhūrāt*, the equivalent of *endoxa*) used in dialectic and rhetoric:

[T]he attributes (*ṣifāt*) of certain premises by which they are measured are other than the attributes of commonly-accepted premises by which they are measured, since the measure (*sibār*) of the commonly-accepted is testimonies (*al-shahādāt*), . . . whereas the measure of the certain is other states (*aḥwāl ukhar*), for example, that they are essential (*dhātīyya*).²⁰

Averroes concludes from this that “there is not any kind of community (*ḍarb al-‘umūm*)” between the standards by which certain and commonly accepted premises are assessed. Epistemically, dialectic and rhetoric are both modes of *opinion* (*ẓann* = δόξα), and opinion, unlike certitude, is defeasible, since it involves believing that “it is possible that the state in which something is found could be the opposite of what we believe about it.”²¹ Averroes’ evaluation of the lower epistemic status of dialectical and rhetorical arguments is in turn dependent on his claim that their principles are grounded in testimony. To identify a belief as common just is to recognize that one assents to it because of its popularity, rather than from any insight into the truth of the matter itself:

Now assent to the widespread, commonly accepted premises (*al-mashhūrāt al-dhā’i’a*) arises only from the testimony (*shahāda*) of all or most people, not from the matter being like that in itself – in contrast to the way it is with demonstration. Indeed, with demonstration, we arrive at assent which is certain through our assenting to premises because to our minds they appear just as they are externally, not because they are someone else’s belief (*ra’y*).²²

Averroes places higher epistemic value on beliefs that are accepted by all people, calling them the “most noble” (*ashraf*). His examples of such beliefs are ethical principles, such as that we should thank a benefactor and respect our parents. The fact that vastly diverse nations and religions agree on these principles despite the differences in their innate dispositions (*fiṭar*) is evidence for this nobility.²³ While this may provide evidence that

²⁰ *LC Posterior Analytics* 161. ²¹ *Ep. Topics* 151 (§2); English trans. from Averroes 1977: 47.

²² *Ep. Topics* 152 (§3).

²³ *Ep. Topics* 158–60 (§13); English at Averroes 1977: 51–52. Slightly inferior to the universally accepted beliefs are those that most people accept or at least do not actively oppose, such as the belief that God is one. Averroes’ assessment of the epistemic status of universally accepted ethical and religious norms seems more optimistic than that of Avicenna, who insists that such ethical premises would not be assented to prior to one’s habituation to a particular social community. While Averroes does not endorse the view that we have innate or primary knowledge of these

these beliefs do in fact hold universally "since particulars are mutable and are not common to the sensation of everyone," insofar as they are commonly accepted on the basis of testimony, they remain mere opinions and as such are epistemically deficient.²⁴

Averroes' most detailed examination of the epistemic status of testimony is found in two early works, one philosophical (*Ep. Rhetoric*) and the other legal (the *Abridgement*, a commentary on a legal text of al-Ghazālī). In his *Ep. Rhetoric* Averroes considers whether testimony is a reliable source for either intelligible (*ma'qūla*) or sensory (*maḥsūsa*) cognition. It is hardly surprising that Averroes does not accord testimony any role in providing certain knowledge of purely intelligible matters: such a view reflects Averroes' commitment to the strict ideal of Aristotelian science as pertaining only to universals, and it is shared by all of Averroes' predecessors, including Avicenna. But Averroes' account of the limitations of testimony in the realm of sensible contingents, such as historical and geographical facts, is noticeably more restrictive than Avicenna's, particularly when their respective accounts of *tawātūr* are considered.²⁵

Averroes grounds his assessment of the epistemic value of testimony regarding sensory matters on an analysis of the natural capacities of our cognitive apparatus for grasping sensible particulars. Averroes quickly dismisses the idea that testimony could play any positive role in providing us with knowledge of present sensible objects to which we have direct observational access.²⁶ Where Averroes does believe that testimony may have some epistemic value is in matters that the person accepting the testimony has not herself observed, and it is to this realm that the

propositions, he does seem to accept their universality in a way that Avicenna hesitates to acknowledge. See Black 2013: 134–37.

²⁴ *Ep. Topics* 160 (§14).

²⁵ On this point in Avicenna, see Black 2013: 133–35. Avicenna's standard examples of *tawātūr* are echoed by Averroes – our knowledge of historical matters (such as that Galen existed) and of the existence of distant places we have never actually visited (such as Mecca). For discussions of *tawātūr* in Averroes, see Aouad 2007b; Bou Akl in *Abridgement* 16–49. For the background in al-Ghazālī, see Weiss 1985.

²⁶ *Ep. Rhetoric* 189–90 (§35); English at Averroes 1977: 74. While this has some plausibility at first glance, it is disappointing that Averroes does not consider the role that corroborative testimony could play in correcting sensory illusions caused by less than ideal perceptual conditions or defects in the perceiver's own sense organs – especially since this sort of error is discussed by Aristotle himself in his accounts of the common and incidental sensibles and imagination (*De anima* III 3, 428b17–30). Two responses come to mind here: (1) if the conditions are less than optimal (e.g., haze or distance impedes vision), then all perceivers will likewise be affected; (2) if the perceiver's sensory apparatus is defective, she cannot really acquire knowledge of the relevant sensory information from someone else. If a blind person is guided by a sighted one, that is, of course, useful for allowing the person to navigate her surroundings, but it does not give her visual cognition, which is what is under discussion in these passages.

traditional Islamic category of *tawātur* applies. Averroes grants that certitude can result from *tawātur* in some cases, and he gives the standard examples of “the sending of the prophet and the existence of Mecca and Medina.”²⁷ But it quickly becomes clear that the certitude in question here is not of great epistemic consequence, since, as a species of testimony (*shahāda*), *tawātur* is by its very nature limited to the production of merely accidental certitude.²⁸

This is not, however, simply a consequence of Averroes’ restriction of testimony to the broadly sensory realm. For as we have seen, Averroes holds that we can have absolute (*‘alā l-iṭlāq*) though nonnecessary (*ghayr ḍarūrī*) certitude regarding the contingent particulars to which sensation provides access.²⁹ Such nonnecessary certitude is not a result of any epistemic defect on our part but, rather, a restriction imposed by the mutability of the objects about which we are certain. *Accidental* certitude, by contrast, is a function not of the nature of what is known but of the believer’s deficient grounds for upholding her belief. We have merely accidental certitude when we hold a strong, true belief from a source that is not naturally capable of conferring certitude. And that, Averroes insists, is all that testimony can ever provide us.³⁰

Averroes’ argument for this is based on a survey of the conditions under which we are able to assent to the “existence of sensible matters” (*wujūd al-umūr al-maḥsūsa*) essentially (*bi-l-dhāt*). The primary source for such assent is sensation itself (*‘an al-ḥiss*),³¹ but there are other sources that can

²⁷ *Ep. Rhetoric* 191–92 (§38); English at Averroes 1977: 75. For the scope of *tawātur*, cf. *Abridgement* 173–75 (§94).

²⁸ The significance of this is again clear if we compare Averroes with Avicenna, who allows *tawāturāt* to produce propositions that are “necessary of acceptance” (*al-wājib qubūlibā*, Avicenna 1892: 56) and fit to serve as principles of demonstration.

²⁹ See the text cited earlier at note 3.

³⁰ In *Abridgement* 176–77 (§98) Averroes also claims that for the most part testimonies (*shahādāt*) produce only opinion (*ẓann*), although he does allow them to bestow certitude (*yaqīn*) in some circumstances. Hence any discussion of the epistemic status of *tawātur* as a form of testimony must take the circumstances (*alwāl*) of the testimony into account. These remarks are at best ambiguous, however. Since Averroes offers no general epistemological account of the nature of certitude in this text, it seems most plausible to take certitude here in a purely subjective sense, i.e., as referring to the degree of conviction one has, rather than the objective necessity of the proposition in question. This would also fit the legal character of the *Abridgement*, where most of the propositions would be commonly accepted (*mashhūrāt*) beliefs rather than necessary truths.

³¹ Averroes clearly means the external senses, since in support of his claim he points out that whoever loses a sense power (*ḥāssa*) loses access to the corresponding sensible object (*maḥsūsa*). This seems intended as an echo of *Posterior Analytics* I 18, 81a38–40 (Arabic version in Aristotle 1980: II.365). But Aristotle says that if we lose some sense (*tis aisthēsis/hiss mā*), then we will lose some knowledge (*epistēmē tisl’ilm mā*), since we learn by induction or demonstration. So Averroes has altered the claim so as to focus on sensory awareness rather than knowledge.

provide us with essential certitude regarding the existence of sensible particulars – Averroes allows that both imagination (*takhayyul*) and reasoning (*qiyās*) are able to do so.³² My image of my cat, for example, can provide me with certain knowledge of his existence while I am traveling.³³ As for reasoning, Averroes uses a familiar theological example of inference from the apparent to the hidden, that is, from an observed effect to its unobserved cause: I can be certain that *some* builder exists, even if I have no direct sensory experience of him. Still, the sensory knowledge available from *qiyās* is limited to certitude of the fact alone: by simply looking at the wall I am usually unable to “the form of the particular builder essentially” (*ṣūrat al-bānī l-khāṣṣ bi-l-dhāt*).³⁴ By this I take it that – Sherlock Holmes notwithstanding – Averroes means that it is impossible for anyone to look at the wall and infer that it was made by Bob the builder, who is six feet tall, dark-haired, and weighs 253 lbs.

In both the imagination and reasoning cases, then, the link between the perceiver and the sensible object of which she is certain can ultimately be traced back to some sensory perception that she herself has experienced. Since sensible objects are naturally apt to be perceived only when they are in physical proximity to our sensory organs, anything that does not bring about the perception of a sensible object in this way cannot be an essential cause of that perception. And this is precisely what is missing in all forms of testimony.

But then how does testimony allow us to form even an accidentally certain belief about the existence of a sensible object that we have never perceived, and even, in rare cases, “to conceive it in accordance with the way it is” (*taṣawwuruhā ‘alā mā hiya ‘alayhi*)?³⁵ Averroes refers the reader to the *Parva Naturalia* for a fuller account of the conditions under we can acquire knowledge of sensory objects that we have never actually experienced:

³² I assume Averroes is using *takhayyul* here to include all the internal senses that play a role in reconstituting our past experiences. I have rendered *qiyās* as “reasoning” rather than “syllogism” or “analogy” here, since Averroes seems to be using the term in a broad sense. His main point is that we need not have direct experience of a particular in order to be certain that it exists.

³³ Averroes is assuming that the imagination contains the traces of past sensory experiences and under normal circumstances is reliable. While images may be hallucinatory and fictional, their basic function is to preserve sensation for use by the intellect.

³⁴ *Ep. Rhetoric* 191–92 (§38); English at Averroes 1977: 75.

³⁵ *Ep. Rhetoric* 192–94 (§§39–40); English at Averroes 1977: 75–76. Butterworth translates “conceive of them according to their essence,” but this may be too strong. The issue is whether we can form an accurate sensory apprehension of their appearances.

Now for the greater number of people, assent to something like this comes about by means of the continuous tradition [*tawātur*] and exhaustive reports. However, it is clear that this is an accidental effect because that about them which brings about assent rarely follows from what is presumed to be its cause, namely, the reports – just as effects rarely follow from their accidental causes. In this science, it is not necessary to dwell upon the cause for this accidental certainty resulting nor upon how it results; for it has already been spoken about in *Sense and Sensible Objects*.³⁶

Indeed, in the *On Memory* section of his commentary on the *Parva Naturalia*, Averroes provides an elaborate account of how the internal senses are able to combine images and memories of past perceptions to yield accurate sensory representations of individuals of which we have no sensory experience.³⁷ Averroes' example is of a person who can imagine what an elephant looks like from its description alone, even if he has never seen one: "Thus, Aristotle relates of a certain one of the ancients that he would form the image of things conveyed to him by hearing, without his ever having seen them, and when those forms were examined in actuality, they were found to be exactly as they had appeared to the person. In this manner it is possible for a person to form the image of an elephant without his ever having perceived one."³⁸ This is clearly the sort of operation Averroes thinks underlies testimonial knowledge – the construction of an image of a sensible particular on the basis of reports, using as raw materials the images one has culled from one's own past experience. Of course, Averroes is not claiming that *tawātur* is nothing but an act of fictional imagination, any more than remembering is. It is simply that all three operations draw on the same internal sensory apparatus in order to construct or recall sensory images.³⁹

³⁶ *Ep. Rhetoric* 192–93 (§§39–40).

³⁷ Averroes follows the standard practice in the Arabic tradition of referring to the whole of the *Parva Naturalia* by the title of its first book, *On Sense and Sensible Objects*.

³⁸ *Comm. Parva Naturalia*, at Averroes 1972c: 45; trans. in Averroes 1961: 28. In his *Ep. On the Soul* 79, Averroes also mentions the elephant as an example of an intelligible we are lacking because we lack the corresponding sensory image, analogous to the blind person's lack of color concepts. The elephant example is also found in Ibn Bājja 2010: c. 5, 144–45), and the ultimate source seems to be in al-Fārābī's *Book of Letters*. See al-Fārābī 1969: 170 (§169). Thanks to David Wirmser for this reference.

³⁹ See Black 1996 for fuller discussion of the relation between memory and creative imagination in Averroes. See Bou Akl in *Abridgement* 24–25 for the elephant example in relation to *tawātur*. Averroes refers to the same mechanisms from the *Comm. Parva Naturalia* to explain how we are able to anticipate future things, in explicating *On the Soul* III. 7, 413b3–8. See *LC On the Soul* 474–77 (Bk. 3, comm. 33); English at Averroes 2009: 377–79.

Averroes' evaluation of the epistemic status of testimony as providing at best accidental certitude ultimately depends on his assessment of the randomness of its psychological underpinnings, which yield unpredictable results "in the way in which effects follow from their accidental causes," as he says in the passage cited above.⁴⁰ In rare cases, they may produce true beliefs, but there is no reliable mechanism that can guarantee success. Attempts to circumvent this haphazardness by stipulating quotas for the number of corroborative reports that produce certitude, as some theologians had done in the case of *tawātur*, are belied by the fact that the quotas fail to track the production of certitude in the audience. This in turn led others to concede that testimonial certitude is merely a matter of subjective conviction: "One of its conditions is that certitude arises from it."⁴¹ While Avicenna is not mentioned by name, he is an obvious candidate to be Averroes' target, especially since his own account of *tawātur* is also presented as a rejoinder to the quota accounts of the Mu'tazilite theologians. And Avicenna's alternative seems to make the very move that Averroes criticizes here: "It is certainty," Avicenna declares, "that determines the sufficiency of the testimonies, not the number of testimonies."⁴² In Averroes' eyes, however, this justification is patently circular, and thus it is an implicit admission that for testimony "there is no condition at all which could be set down and no means by which essential certainty (*al-yaqīn bi-l-dhāt*) could result."⁴³

Ultimately, then, Averroes' objection to both the *kalām* and the Avicennian accounts of testimonial certitude is a very basic one: neither quotas nor feelings of conviction, however numerous or strong they may be, can be essential causes for our knowledge of any sensible object. Even if these things function as signs of some underlying, relevantly essential grounds for belief, it will be those grounds that justify those beliefs and thereby render them certain. And if such grounds do exist, they will be open to investigation and discovery in the appropriate science, namely, the psychological study of sense perception. But what such a study instead shows us is

⁴⁰ This seems to parallel the claim in the *Abridgement* (see note 27 earlier) that the strength of assent based on continuous tradition depends on its circumstances: it is not an essential effect of the testimony itself but varies from one person to the next.

⁴¹ *Ep. Rhetoric* 194 (§40); English at Averroes 1977: 76.

⁴² Avicenna 1892: 57–58: "Whoever tries to limit these testimonies (*al-shahādāt*) to a numerical range seeks the impossible. For they are not bound by a number in which decrease and increase have no effect. Rather, they depend only on the range with which certainty occurs. It is certainty, therefore, that determines the sufficiency of the testimonies, not the number of testimonies."

⁴³ *Ep. Rhetoric* 194 (§40); English at Averroes 1977: 76 (trans. modified).

that testimony on its own is just not up to the task of justifying either sensory or intelligible knowledge.

Nonetheless, it would be a mistake to assume that Averroes intends to reject all appeals to testimonial evidence within the sciences, let alone in the social contexts that in his view are the proper domains of dialectical and rhetorical arguments. Averroes' view of testimony does not entail that the astronomer cannot rely at all on recorded observations that bear witness to celestial phenomena that he cannot observe for himself, or that the natural philosopher must jettison all of the information detailed in Aristotle's zoological works. Nonetheless, no matter how reliable Aristotle's descriptions of animals may be, any image that a later philosopher constructs of an elephant that is based solely on Aristotle's testimony will not give *him* direct sensory awareness of an elephant. By the same token, any scientific knowledge that relies on such testimony will also need to employ cause–effect inferences, analogies, and other complex forms of reasoning to reach certain knowledge.⁴⁴ In Averroes' view, these additional epistemic resources should not be confused with testimony itself. Indeed, attempts to build them into testimony through positing things such as hidden syllogisms serve only to undermine the epistemic status of the sciences that must make use of testimonial evidence, since scientific knowledge requires that we are able to articulate the reason why our conclusions are true.

No Shortcuts: Averroes' Rejection of Intuitive Knowledge

In Averroes' assessment of testimony, one of the central themes that emerges is the importance of acquiring knowledge in the relevant way and from the sources appropriate to the problem under investigation. Nowhere is this principle more apparent than in the chapter *On Dreams* of his commentary on the *Parva Naturalia*, where Averroes launches an attack on the claim that the theoretical sciences can be acquired through dreams, without the effort of syllogistic reasoning that which is normally required.⁴⁵ This section of the commentary thus constitutes an implicit

⁴⁴ The status of history in Averroes' account remains problematic, but that does not seem to me to be peculiar to his account of testimonial knowledge.

⁴⁵ *Comm. Parva Naturalia*, at Averroes 1972c: 89–92; trans. in Averroes 1961: 51–53. For a discussion of this text in the context of Averroes' overall views on prophecy, see Davidson 1992: 340–45. For the background in the Arabic version of the *Parva Naturalia* and a consideration of its reception by Averroes and other Arabic authors, see Hansberger 2008; a detailed analysis of Averroes' account of dreams and divination is provided in Hansberger forthcoming (a).

refutation of the Avicennian theory of intuition (*hads*) as it is applied to the phenomenon of prophecy in the doctrine of the "holy intellect" (*al-'aql al-quḍī*).⁴⁶ In order to understand Averroes' own position, then, it will be helpful to begin with a brief sketch of his implied target.

Avicenna's theory of intuition (*hads*) is rooted not in Aristotle's account of the νοῦς of principles in *Posterior Analytics* 2.19 but in the brief discussion in *Posterior Analytics* 1.34 of ἀγχινοια ("quick wit" or "acumen"), the capacity to discover the middle term of a syllogism on observing the connection between the two extremes.⁴⁷ Avicenna takes intuition to be a capacity that most humans possess in greater or lesser degrees: sometimes he cashes out the ability in terms of the degree to which one depends on a teacher to learn; other times he describes it in terms of the extent to which one needs to investigate a problem before discovering the middle term. Avicenna seems to take intuition as the principal marker of genius, and his autobiography suggests he saw himself as possessed of great intuitive gifts.⁴⁸ It is these features that enter into Avicenna's appeal to intuition to explain the unusual but nonetheless entirely natural gifts of the prophet: he is the person who "blazes with intuition" and seems to learn almost everything instantaneously and without a teacher. A central point in Avicenna's account is his claim that since intuition involves the possession of the explanatory middle term, it is able to yield certain knowledge. It is not a form of blind faith (*taqlīd*) but the apex of comprehension and insight. For the gold standard of knowledge – as exemplified by *propter quid* demonstrations – consists of nothing other than the understanding of how the middle term causes the predicate of the conclusion to belong necessarily to the subject.⁴⁹

While Averroes shares Avicenna's desire to naturalize prophecy, most of his effort is expended on offering a scientific explanation of true dreams that accurately predict future contingents. At the very end of the discussion, however, Averroes turns to the question of whether it is possible to acquire abstract theoretical knowledge in dreams.⁵⁰ In sharp contrast to Avicenna, Averroes is adamant that a proper understanding of the nature

⁴⁶ Kogan (1985: 82–83) also suggests that Avicenna's theory of prophecy is at stake in this refutation by Averroes.

⁴⁷ *Hads* does not translate *anchinoia* (Arabic *dhakā'*) but is part of the translation of *eustochia* (Arabic *ḥusn hads*), which Aristotle uses in the definition of *anchinoia*.

⁴⁸ Cf. Gutas 1988: 173–76.

⁴⁹ Avicenna 1956: 248–50; trans. in McGinnis and Reisman 2007: 204–5; Avicenna 1952: 35–37.

⁵⁰ The main disanalogy between Avicenna's account of intuitive prophecy and the view Averroes attacks is that this form of Avicennian prophecy is not one that occurs while the prophet is asleep. But this point does not play any essential role in Averroes' own refutation of the theory.

of knowledge rules out in principle any alternative means of acquiring certitude regarding those propositions to which demonstration is the usual route.

Averroes offers two arguments in support of his claim, one based on natural teleology and the other more directly focused on epistemological concerns. On the teleological side, Averroes claims that it is essential to human nature (*ṭibāʿ al-insān*) to acquire the speculative sciences through inferences that can be traced back to the primary propositions with which humans are naturally endowed. If the process of ratiocination were not a necessary one for all human beings, then nature would act for the most part in vain, since the primary propositions would no longer be essential for the acquisition of demonstrated knowledge of the conclusion. This would make the principles otiose in the way that feet would be otiose if there were people who could walk without them! In effect, these few individuals who have access to intuitive shortcuts for bypassing instruction would not really be human, but divine:

This is true for the reason that it is in the nature of a human to comprehend the theoretical sciences by means of a knowledge of the primary propositions with which he is endowed, and if he could comprehend them without the propositions, the primary propositions that he is endowed with would be useless— as in the case where, if it were possible for a person to walk without his feet, his feet would be useless and in vain. Nature, however, rejects such an assumption. In general, the acquisition of any of the concepts of the theoretical sciences in this manner would be accidental and rare. It is therefore impossible that a theoretical art be fully acquired by a person, by God, unless one assumes that we have here a species of human that can comprehend the theoretical sciences without training. Now this species, if it indeed existed, would be called “human” only equivocally, but actually it would be closer to angels than to humans.⁵¹

From a more properly epistemological perspective, Averroes argues that if certitude can be had intuitively, without any learning at all, the result will still not be knowledge, but something else: “Speculative knowledge (*al-maʿrifa al-naẓariyya*) is in itself one and unchangeable (*fī naṣihā wāḥida ghayr mutaghāyira*), whether it is known by instruction or without instruction. But if it were known in both ways together, then instruction would not be included in its definition nor would it be necessary for its substance to arise.” The upshot, then, is the same as for the teleological argument:

⁵¹ *Comm. Parva Naturalia*, at Averroes 1972c: 89; cf. Averroes 1961: 51.

Either we admit that this kind of knowledge is said of human knowledge (*al-ma'rifa*) only equivocally, or we agree that one thing in itself can exist through different causes . . . But if someone were to say that it is possible for the images of theoretical things (*khayālāt al-umūr al-naẓariyya*) to arise for one class of people (*ṣanf min al-nās*) through this mode of perception, this would be impossible because their arising in this way would be superfluous (*fadl*), since they have already arisen for humanity in a more perfect manner – unless one were to say that it is possible for this type of perception to be existent in those for whom instruction in the theoretical sciences is not possible, either by nature or for some other reason. But if such people exist, they are human equivocally.⁵²

In effect, Averroes is claiming here that instruction is part of the essence of theoretical knowledge. Every known proposition has as the cause of its being known a process of deductive instruction based on the pre-existent knowledge of first principles. Averroes' argument is simple: if there are rare cases when speculative knowledge is acquired without such reasoning, that is tantamount to admitting that the relation between causes and their effects is neither necessary nor invariable. And this is precisely what Avicennian intuition presumes. It divides theoretical knowledge – which is a univocal notion – into two varieties, one acquired through instruction and the other attained independently through intuition. Even if both of these modes of acquisition were possible, they would yield two very different cognitive states.

Ultimately, then, intuitive theories of knowledge-acquisition fail to provide any causal explanation for the speculative sciences that can account for the contribution made by discursive reasoning in the ordinary process of learning. Contrary to his earlier suspicion that intuitive knowers would have angelic rather than human minds, Averroes in the end claims that the intuitive cognizer's state will be epistemically inferior to that of normal learners. The very fact that intuition bypasses the inferential process means that whatever cognitive state it yields lacks the defining property of knowledge. It would, in effect, be like giving someone the pieces of a puzzle in the proper configuration, and then congratulating him for successfully completing the puzzle. At best a person with intuitive gifts such as those described by Avicenna would possess mere "images of speculative things" (*khayālāt al-umūr al-naẓariyya*). And mere images acquired in this way would be superfluous in the overall scheme of human knowledge, since they would be duplicates or, rather, inferior copies, of the

⁵² *Comm. Parva Naturalia*, at Averroes 1972c: 90; cf. Averroes 1961: 52.

knowledge acquired through the normal channels. The only reason that someone would need to acquire knowledge in this way would be because he lacked the natural capacity to learn.

Conclusion

Averroes' critique of intuitive shortcuts to theoretical knowledge turns in large part on his fidelity to the opening lines of Aristotle's *Posterior Analytics*, which Averroes takes to provide the necessary and sufficient conditions for the acquisition of all knowledge – not just certain demonstrative knowledge, but also dialectical and rhetorical opinion.⁵³ On Averroes' reading, Aristotle's proposition – that “all teaching and all intellectual learning come about from already existing knowledge”⁵⁴ – has two basic ramifications. First, it establishes a strong foundationalist framework for epistemology, according to which all inferential knowledge must be reduced to the understanding of its ultimate first principles. While Averroes does not reject entirely the reliabilist elements that al-Fārābī introduced into *falsafa* epistemology,⁵⁵ he certainly minimizes their role, in particular through his rejection of all appeals to unconscious syllogisms as justifying the principles of both demonstrative and non-demonstrative assent. Averroes himself has a rather sparse account of the principles, as we have seen, restricting them to two broad categories: the primary propositions, which include both natural and empirical premises, provide the foundations for certain assent; whereas testimony provides the foundation for all widely accepted propositions employed in dialectic and rhetoric. Unlike Avicenna, Averroes eschews complex subdivisions within these two sets of primaries, perhaps because he believes that they obscure the distinction between primary and inferential knowledge, while at the same time disguising the radically empirical foundations of all knowledge.

Second, Aristotle's opening line ties knowledge inextricably to the process of instruction, which Averroes construes broadly to mean any discursive derivation of conclusions from premises. While he does not focus much on the role of a human teacher or guide in this process, he is insistent that the process itself is important. This yields what we might call a holistic view of knowledge: not only is it important that we acquire the principles in the right way and from the right sources, and deduce the

⁵³ See *LC Posterior Analytics* 165, 168–69 (Bk. 1, comm. 1).

⁵⁴ Aristotle 1984a: *Posterior Analytics* I 1, 71a1. ⁵⁵ On this point, see Black 2006.

conclusions according to recognizably legitimate patterns; it is also crucial that the conclusions be taken together with their premises and understood as an integral whole. Those who, like Avicenna, posit intuitive modes of cognition that bypass investigation and reasoning violate the integrity of knowledge conceived in this way. For Averroes, however, there are no shortcuts to knowledge, whether they be intuitive ones leading to intelligibles or testimonial ones leading to sensibles: human knowers can only take the long way around.

*Averroes on Knowing Essences**David Wirmer***Introduction: Reflexivity and the Status of Intelligibles**

Averroes' theory of intellect in his *LC On the Soul* arises from an attempt to provide a carefully calibrated reconciliation of two basic intuitions about intellectual cognition that, when closely examined, seem to lead to contradictory conclusions about the nature and ontological state of that which the intellect grasps when it knows something, i.e. the "intelligibles."¹ This opposition may roughly be described as the tension between the universality of thought and the individuality of thinking. A very short summary of this problem and the solution proposed by Averroes is necessary in order to adequately place the question to which the present study is dedicated, and to appreciate its ramifications.

On the universal side Averroes argues that intellectual cognition is the activity of "discerning the nature of the forms inasmuch as they are forms." If it failed to do so, the intellect would particularize these forms and thus be no more than a sort of sense-perception or imagination; it would not be able to grasp actual intelligibles.² In fact, Averroes puts the bar for something to count as a genuine intelligible very high: it must not retain any trace of the multiplicity characteristic of imagination and sense-perception but be completely unitary and identical for all knowers or else it would not constitute real knowledge but rather send us on an interminable search for common concepts.³ Therefore the receptive or "material"

¹ We have to leave aside here the cognate question of whether the intelligibles are the object or merely an instrument of intellectual knowledge. On the closely related question of the object of definition, see Di Giovanni 2003. A general remark concerning terminology: while Michael Scot, the Latin translator of Averroes' *LC On the Soul*, uses the two terms *intelligibilia* and *intellecta*, apparently in order to distinguish between the potential and actual objects of knowledge, the Arabic language possesses only one term, *ma'qūlāt*, for both aspects. For this reason I translate both terms as "intelligible."

² *LC On the Soul* 388.37–44 (Bk. 3, comm. 5). The English quotes are, for the most part, taken from the translation by R. C. Taylor, here Averroes 2009: 304–5, with occasional alterations.

³ *LC On the Soul* 411.713–412.721 (Bk. 3, comm. 5).

intellect has to receive the intelligibles in an immaterial manner, and hence be immaterial and eternal itself.⁴ By consequence the intelligibles received in and identified with the intellect apparently have to be eternal too.⁵

On the individual side Averroes underscores the Aristotelian dictum that “the soul never thinks without an image” (431a16ff.). Because of this essential dependence on sensibility, the intelligibles remain linked to images and are destroyed when we lose the images.⁶ Moreover, if the intelligible intentions apprehended by the intellect were eternal, the imagined intentions on which they rely would have to be eternal too, and even the sensible things from which these intentions were abstracted in the first place would have to be eternal. Or else one would have to assume, per impossibile, that something corruptible were transformed into something eternal.⁷ For, as Averroes makes clear, “the intelligible intention is the same as the thing which sense apprehends in the sensible.”⁸ Also, the intelligibles cannot be purely one and identical for all knowers, for otherwise my thinking would always be shared by everybody else.⁹

The only way to reconcile the two insights, Averroes argues, is, in fact, to consider the intelligible as both one *and* multiple at the same time, namely “multiple in the subject by which it is true . . . and one in the subject by which it is an existing intellect.”¹⁰ These “two subjects” on which the intelligibles rest are the two causes that jointly produce the intellective act: the intentions in the imagination are “the subject by which [the intelligibles] are true,” while the material intellect constitutes the subject “by which the intelligibles are one of the beings in the world” (*unum entium in mundo*).¹¹ It is necessary, Averroes explains, to differentiate two modes or aspects in the intelligibles: relative to each individual knower the intelligibles are multiple; they are generated and corrupted in accordance with their “mover,” namely the “intention of the imagined forms.” However, considered “insofar as they are simply beings” (*secundum quod sunt entia simpliciter*), i.e. in the unique material intellect, each of the

⁴ Ibid., 388.45–389.67 (Bk. 3, comm. 5).

⁵ Ibid., 399.344–47, 370–400.376 (Bk. 3, comm. 5). On the unity of intelligible and material intellect, closer than the unity of form and matter, cf. *ibid.*, 404.501–505, 520.

⁶ Ibid., 469.21–27 (Bk. 3, comm. 30).

⁷ Ibid., 391.132–43 (Bk. 3, comm. 5). On Averroes’ concept of intentions (*intentiones = ma’ānī*, sing. *ma’nā*) and its antecedents, see Wirmer 2004.

⁸ *LC On the Soul* 506.28–32 (Bk. 3, comm. 39).

⁹ Ibid., 411.710–13 (Bk. 3, comm. 5).

¹⁰ Ibid., 411.707–412.728 (Bk. 3, comm. 5); my translation here deviates from that of Taylor, who writes “many in subject insofar as it is true.” The point emphasised by Averroes is not that the intelligible has many subjects but rather that, for this very reason, it is itself multiple.

¹¹ Ibid., 400.379–90 (Bk. 3, comm. 5).

intelligibles is one and eternal. Averroes concludes that the “being,” the ontological status, of the intelligibles is “midway between transient and permanent being” (*istud esse est eis medium inter esse amissum et esse remanens*).¹² There is thus a perspective in which Averroes does not hesitate to call the intelligibles by themselves “one of the beings” (*unum entium*).¹³ What is more, he affirms that the intelligibles are “in their essence” (*bi-l-dāt*) eternal, namely insofar as they constitute a “species” (*naw*), and corruptible only “accidentally” with respect to individual knowers.¹⁴

This two-tiered account of intelligibles, and especially the superior, eternal level, gives rise to internal problems, some of which have been treated elsewhere.¹⁵ In particular, it can be asked whether Averroes has drifted toward a Platonic conception of knowledge when he ascribes to each item of knowledge – insofar as it is considered as one and identical for all knowers and not related to sense-perception and imagination – the ontological state of “one of the beings in the world.”

The present study tries to further elucidate Averroes’ views on the relationship between intellection and sense-perception by analyzing his interpretation of one passage in the *On the Soul* where Aristotle explicitly differentiates between a type of knowledge that is acquired by the joint efforts of intellect and sense-perception, and another type of knowledge that seems to belong to intellect alone. Lines 429b10–22 of chapter III 4 deal with the difference between the apprehension of concrete objects like water and flesh and the apprehension of their essential characteristics that lets them “be water” and “be flesh” – their “what it was to be [them]” (τὸ τί ἦν εἶναι). Averroes, in this context, develops a reflexive account of the knowledge of essences. More precisely, he apparently suggests that the intellect reflects on knowledge previously acquired with the help of sense-perception of “the first form existing in this single thing,” in order to obtain knowledge of “the quiddity of the form.”¹⁶ The disposition for this reflexive act “by which he apprehends the quiddity and form” would belong to the intellect “in itself, not in virtue of the senses.”¹⁷

¹² Ibid., 407.581–604 (Bk. 3, comm. 5); for the sources and background of the terms *amissum* and *remanens*, cf. Averroes 2008b: 215 n. 112; cf. also the similar distinction in Averroes’ commentary on Alexander’s *De intellectu* quoted by Taylor in Averroes 2009: 323 n. 92.

¹³ *LC On the Soul* 401.419–23 (Bk. 3, comm. 5).

¹⁴ Thus Averroes says in his commentary on Alexander’s *De intellectu*; see Zonta 2001: 29; cf. also Wirmer 2008: 363, 404.

¹⁵ Wirmer 2008: 403–9. ¹⁶ *LC On the Soul* 424.21–28 (Bk. 3, comm. 10).

¹⁷ Ibid., 425.23–27 (Bk. 3, comm. 11).

This reflexive intellection supposedly continues “until [the intellect] reaches the simple form.”¹⁸

The theory, thus understood, bears close similarity to an argument by Ibn Bājja that Averroes discusses – and rejects – when he deals with the question of whether and how man can conjoin with the agent intellect. In this different context Averroes describes the argument as one Ibn Bājja has borrowed from al-Fārābī’s treatise *On the Intellect* and which is built on the assumption that the intellect can “extract forms and quiddities of intelligibles”;¹⁹ i.e. once the intelligibles have come to be in a first act, they may be subjected to further reflexive acts. According to one version of this argument, propounded in Ibn Bājja’s *Book of the Soul*, or so Averroes says, the intellect would be able to abstract from an intelligible (which is already the result of an act of abstraction and has hence been generated) the quiddity of that intelligible. If this process is not to go on infinitely, the intellect must, in the end, grasp “a quiddity not having a quiddity,” i.e. a pure quiddity, “and what is so is a separate form.”²⁰

Averroes alludes to this theory in one other place of his *LC On the Soul*, namely in the passage immediately preceding his discussion of the knowledge of essences. There he offers two possible interpretations of Aristotle’s statement that the intellect, once it has become actualized by the acquisition of knowledge, can think itself.²¹ The first interpretation, ascribed to Alexander of Aphrodisias and with which Averroes seems to agree, is based on the identity of intellect with the intelligible forms it has abstracted and now knows. Inasmuch as it knows the intelligibles, the intellect accidentally knows itself also. Only a separate intellect, and most properly only the first intellect, can know itself essentially because it is not actualized by distinct objects of knowledge but is always already an intellect in act.²² The second interpretation belongs to al-Fārābī’s treatise *On the Intellect* and suggests, on the same basis as the first interpretation, that the actualized intellect (or, rather, the intelligibles in it) becomes “one of the beings” and

¹⁸ Ibid., 424.28–33 (Bk. 3, comm. 10).

¹⁹ Ibid., 490.322–491.334 (Bk. 3, comm. 36); cf. al-Fārābī 1938: 17.9–18.5.

²⁰ *LC On the Soul* 491.384–491.354 (Bk. 3, comm. 36); on Averroes’ report and criticism of Ibn Bājja’s arguments, cf. Wirmer 2006: 570–75, 580–86; on Averroes’ own theory, see Wirmer 2013: 357–61.

²¹ *LC On the Soul* 419–20 (Bk. 3, comm. 8). As Taylor rightly says, the topic here is self-knowledge, even if the Latin text suggests otherwise; cf. Averroes 2009: 334 n. 133.

²² Alexander 1887: 86.14–23 and 109.4–110.4; cf. Averroes 2009: 335 n. 134; Averroes 1998b: 239 n. 287.

may thus lend themselves to further abstraction.²³ By an intention, abstracted from itself qua actively intellecting, the intellect would thus know itself. Averroes adverts to the assumption underlying this second interpretation by saying: “Thus the intelligible will have intelligibles.” We may add that this argument also implies, as does Ibn Bājja’s argument paraphrased above, that the intelligible of intelligibles is a self-thinking intellect. Averroes ends his comment by proposing to examine later whether the account of self-thinking provided by this second interpretation is possible.

If we come back now to the problem initially described, the problem that Averroes’ “Platonic” view of intelligibles poses for the theory of the *LC On the Soul*, we may say that the two interpretations of self-knowledge – the one proposed by Alexander, the other tentatively suggested by Averroes in a Farabian spirit – can help to distinguish two quite different meanings of the formula “one of the beings of the world.” To say of the intelligibles, when actually known, that they are “beings” must not, when understood in the sense of Alexander, mean more than that actual thought exists. The intellect that possesses this actual thought does think itself, not because it reflects on the actual thought but because, being in and of itself nothing more than a potentiality for thought, its actuality is not different from the actual thought itself. Hence, having actual thought simply *is*, albeit accidentally, self-knowledge. On al-Fārābī’s assumption, however, the actual intelligibles as “beings” (and hence the actualized potentiality for thought that is identical with them) acquire a reality of their own. They have the same kind of being that the extramental beings possess, and may therefore be made the subject of an abstractive (and now reflexive) act. Here actual thought is not at all self-knowledge; rather, self-knowledge is the intelligible that can be abstracted from intelligibles of the first order. As a result, al-Fārābī’s interpretation claims precisely what Alexander’s interpretation denies: that we can, via abstraction, ultimately attain the kind of self-knowledge possessed by a separate intellect.²⁴

Against this backdrop, Averroes’ account of the knowledge of essences is invested with particular importance. For, if he indeed proposed a reflexive model along the lines of al-Fārābī’s and Ibn Bājja’s theories, as some have

²³ His own description of the actualized state of the intellect, given in *LC On the Soul* 420.8–9, corresponds to the formula by al-Fārābī, which he quotes when explaining the second interpretation; *ibid.*, 420.32. On the meaning of this formula in al-Fārābī and Ibn Bājja, see Wirmer 2014: 446–52, 638–40, and the later section on “Reflexive Knowledge.”

²⁴ That is not to say that Alexander denies the possibility of knowing separate substances (forms). To the contrary, cf. e.g. Alexander 1887: 87.24–88.16.

quite justifiably supposed,²⁵ not only would Averroes contradict his own strictures against Ibn Bājja's theory of intellectual perfection, but, more importantly, he would give one more proof of having reified intelligibles in a way not consonant with his Aristotelian convictions. As it turns out, however, the reflexive model that Averroes develops to explain the knowledge of essences is notably different from Ibn Bājja's theory and, most probably, constitutes a direct response to Ibn Bājja – or that is at least what the following sections will aim to show. While this result does not suffice to entirely absolve Averroes from the charge that he reifies the intelligibles, it will hopefully contribute to a better understanding of his view on the cooperation of sense-perception and intellect.

Paraph. and LC On the Soul on the Knowledge of Enmattered Forms

Turning now to Averroes' interpretation of Aristotle's distinction between the knowledge of compounds of matter and form, and the knowledge of essences, there immediately present themselves several pressing concerns that, for lack of space, we must largely pass over. The most obvious problem is the meaning of the Aristotelian text itself, which has received widely divergent interpretations and translations.²⁶ Another difficulty is determining the precise wording in which this text was transmitted to Averroes in Arabic; it seems to have been particularly faulty in this passage.²⁷ In view of the loss of not only the Arabic original of Averroes' commentary but also the Arabic original of Ishāq ibn Hunayn's translation, which he mainly used,²⁸ the Latin translation of the *LC On the Soul* has to be treated with extreme circumspection. Mistakes might derive from various sources, namely the Arabic translator, the Arabic manuscript owned by Averroes, the Latin translator, and finally the transmission and edition of the Latin text. It will be best then to start directly with the key passages of Averroes' exposition and to consider the Aristotelian text and the accidents of transmission only insofar as this proves necessary for clearing up his position.

In his *Ep. On the Soul* Averroes does not take up the relevant passage at all; it is in the *Paraph.* that we find his first interpretation of the lines

²⁵ Cf. Taylor's remarks in Averroes 2009: 338 n. 141, 339 n. 143. The similarity is very suggestive, and I was at first following the same idea while preparing the present study.

²⁶ Cf. e.g. Hick's notes *ad locum* in Aristotle 1907: 485–93, and Lowe 1983.

²⁷ Cf. Averroes 1998b: 245–48 nn. 303, 311, 312, 314, 315.

²⁸ On the transmission of the treatise *On the Soul* in Arabic, see Ivry 2001; Elamrani-Jamal 2003; Wirmer 2008: 314–16.

429b10–22 of *On the Soul*, chapter III 4.²⁹ The *LC* then gives a detailed analysis and interpretation in the three *commenta* 8–10 of book III. The most notable and most debated feature of this passage is the simile Aristotle uses in order to illustrate the two types of knowing and their relationship – he compares these to the bent and straight states of a line (429b14–18) – and it is around this analogy that Averroes’ interpretation crystallizes.

In this section we will look at the condensed presentation in the *Paraph.* *On the Soul* and compare it with the *LC*, in order to bring out not only the common features characteristic of Averroes’ reading of the text but also the considerable differences between the two versions. In fact, contrary to what previous interpreters have claimed,³⁰ Averroes fundamentally changed his mind about how to decipher Aristotle’s analogy. Only in the *LC* does Averroes construe the knowing of essences as a reflexive act.

Aristotle, after having introduced the difference between something and its essence (429b10–12), first examines the different ways of discerning (κρίνει) these with respect to physical substances like “flesh,” which is to be distinguished from “being flesh” (b12–14). A little later Aristotle finds the same difference in abstract, especially mathematical objects (b18–21). Both cases are shown to be similar: flesh cannot be without matter, but is – like the snub-nosed, Aristotle’s favorite example – a specific form in a specific matter (τόδε ἐν τῷδε). Now, mathematical objects, e.g. “the straight,” behave in analogous fashion, for they may be analyzed into a formal characteristic, “straightness,” and the “extension” or, rather, “the continuum” in which the form inheres.³¹ In his discussion of both physical and mathematical objects, Aristotle uses the same formula for describing the way the essence, as opposed to the concrete substance, is discerned, namely “by something different or [by the same thing] differently disposed” (b13, b20ff.).³²

²⁹ *Paraph. On the Soul* 113.14–114.9. For the debate on the relative order of the *Paraph.* and the *LC*, and my reasons for following, by and large, the traditional hypothesis, see Wirmer 2008: 344–51. R. C. Taylor comes to a similar conclusion in Averroes 2009: xxviii–xxxiii.

³⁰ De Libera, in Averroes 1998b: 249 n. 319, claims that the *Paraph.*’s account, that is, that of the so-called *Middle Commentary*, is a “more laconic” version of what Averroes says in the *LC*; Taylor surprisingly says that “in his *Middle Commentary*, there is nothing corresponding to this text of Aristotle,” in Averroes 2009: 338 n. 341.

³¹ For this and the later remarks on the Aristotelian text I have consulted Rodier (Aristotle 1900: 442–53); Hicks (Aristotle 1907: 485–93); Ross (Aristotle 1961: 290–94); Hamlyn (Aristotle 1993a: 137–38); Shields (Aristotle 2016: 306–8); Lowe 1983; and Polansky 2007: 445–51.

³² I have here adapted Hamlyn’s translation, which is the most neutral; cf. Aristotle 1993a: 58.

In his *Paraph.* Averroes paraphrases this formula by saying that, inasmuch as some thing (*shay'*) and its essence (*māhiyya*) are different, these two “intentions” must either be apprehended by two different faculties, namely when each of them is apprehended separately (*'alā hida*), or they must be apprehended by the same faculty in two different states, namely when one apprehends that the essence of the thing is different (*ghayr*) from the thing having this essence.³³ Thus, Averroes understands the two alternatives mentioned by Aristotle not as alternative explanations of the distinction in question but as two really distinct cases. His following remarks explain these two cases by making use of the line analogy:

This is the case because [1] we apprehend the essence and form of an object by means of the intellect, [2] whereas we apprehend an individual of this essence by means of the sense. [3] Moreover, it is by means of the intellect that we apprehend that this essence is in that designated individual – that is, in the matter of that form . . . This is the state of the intellect which Aristotle has compared to a bent line (*khaṭṭ mun'aṭif*), I mean, he has compared [=1] the intellect's grasp of form to a straight line (*khaṭṭ musta-qīm*) and [=3] its grasp that the form is in a substrate to a bent line.³⁴

Averroes thus ascribes to the intellect two different acts of cognition, one in which it grasps the essence separately, and another in which it grasps the essence in matter. These two types of intellectual cognition neatly correspond to the two cases that Aristotle was seen talking about: knowledge of essences and knowledge of individual substances.³⁵ However, Averroes now distinguishes three different acts of cognition.³⁶ He adds to the former the apprehension of the “individual of this essence” (*shakhṣ tilka l-māhiyya*) by means of sense-perception. It may not be readily apparent why and how the individual of an essence and the essence in matter, or in the “designated individual” (*shakhṣ mushār ilayhi*), are different from each other. If we are allowed to draw conclusions from

³³ *Paraph. On the Soul* 113.14–20; Ivry's punctuation and translation is faulty, the clause *wa-dhālika 'indamā . . . ṣūra* (line 19f) is the end of the preceding period, not the beginning of the following one. I made the same mistake in Averroes 2008b: 127.

³⁴ *Paraph. On the Soul* 113.20–114.4, translation by Ivry, considerably adapted.

³⁵ It is convenient for our purpose to accept Averroes' identification of the compound with the individual, but most likely Rodier (Aristotle 1900: 447–48) is correct when he says that Aristotle's discussion of the apprehension of flesh has in view not so much the concrete individual substance as flesh in general. However, one need not accept Rodier's conclusion that for that reason sense-perception plays no role in this apprehension; Aristotle's point is precisely that it does, as we shall see later. In this perspective, even the general apprehension of a compound cannot do without consideration of (some) individual(s).

³⁶ Pointed out by de Libera; see Averroes 1998b: 246 n. 308.

Averroes' claim that the individual of the essence is known by sense, while the essence in the individual is known by intellect, we may propose something like the following: sense-perception apprehends individuals; these individuals are of a certain essence but are known qua individual, not qua essence. The intellect, to the contrary, apprehends that an individual has a certain essence, that it belongs to a certain species of beings, flesh for instance. Thus the intellect does not know the individual qua individual; rather, it recognizes the essence in its individualized state. Only the intellect then knows an individual *as* something, whereas the senses, even if they do receive an impression of the "individual of this essence," cannot tell the essential from the global impression.

As we saw above, Averroes' distinction between three different acts of cognition is attached to a peculiar understanding of Aristotle's formula "by something different or [by the same thing] differently disposed." Averroes' concurrent but more elaborate remarks in the *LC On the Soul* reveal that his interpretation owes much to Themistius' paraphrase. For although Themistius does not present a clear tripartition,³⁷ he does explain the "differently disposed" as two dispositions of the intellect, one in which it makes use of sense and imagination when apprehending the form-matter-composite, the other in which it acts independently when apprehending the form alone.³⁸ In order to accomplish the first of these acts, says Themistius, the intellect has to apprehend both matter and form and to distinguish between them, and thus to be both one and two, just like the common sense when it distinguishes between the primary sensibles of different senses, e.g. taste and color.³⁹ The difference between intellect insofar as it uses sense-perception and intellect acting independently renders this unity in duality possible.

Now, this account seems to imply the existence of a third case, namely the independent action of sense-perception, and this is precisely what Averroes makes explicit in both *Paraph.* and *LC On the Soul*. In the latter text he explains that two powers, i.e. sense and intellect, separately apprehend the individual thing (*individuum*) and the form, while one power, the intellect, apprehends the "difference" (*alietatem*) between the two. The intellect apprehends the individual thing "by means of sense-perception"

³⁷ Themistius 1899: 96.12–13 says that for the apprehension of things as a "whole," i.e. form-matter-compound, sense or imagination is "sufficient" (ἀποχρῶσα) and immediately afterward (96.19–21) shows that intellect, in order to know the compound, "needs" (δεῖται) imagination. Yet he does not clearly differentiate these two ways of knowing the compound.

³⁸ For this and the following, see Themistius 1899: 96.8–21; Themistius 1996: 120.

³⁹ The allusion is to *On the Soul* III. 2, 426b8–427a16.

(*mediante sensu*) and it apprehends the form “by itself” (*per se*). Being thus one and multiple at the same time, like the common sense, the intellect is capable of grasping the difference between the individual thing and its form.⁴⁰

This adoption of Themistius’ interpretation by Averroes, unambiguous as it seems to be, nevertheless calls for several remarks – two notes on transmission, and a more fundamental systematic point. First, we have to note that the interpretation we have just summarized on the basis of the Greek text of Themistius’ paraphrase does not appear in the extant Arabic translation. It is affected by a long interpolation that has replaced Themistius’ comments on *On the Soul* 428b2–429b31 with similar explanations, which are, however, shorter and much different in detail.⁴¹ The parallels between the Greek Themistius and Averroes’ exegesis are very close, not only concerning the present comparison of intellect and common sense, but also with respect to another important feature that we will shortly meet. It is virtually certain therefore that Averroes had access to this part of Themistius’ paraphrase in the same shape that we know from the Greek.⁴²

The second thing to be noted is that Averroes has probably made use, in the present context, of the anonymous rendering of *On the Soul* that he sometimes quotes as alternative translation (*alia translatio*) but does not adduce here explicitly. This translation could make it appear (a) that Aristotle talks about three different acts of cognition, one attributed to sense perception, the other two to intellect, and (b) that the two acts attributed to the intellect concern, on the one hand, knowledge of the essence and, on the other hand, knowledge of the “difference” (*ghayriyya*), that is to say the difference between the essence and that of which it is the essence. As evidenced in the *LC On the Soul* by the talk about *alietas* – the direct equivalent of *ghayriyya* – Averroes combined the suggestions of this anonymous translation and Themistius’ paraphrase in order to analyze the cognition of individual things and essences by means of his triple distinction.⁴³

⁴⁰ *LC On the Soul* 422.39–55 (Bk. 3, comm. 9). The profound influence of Themistius’ *Paraphrase* on Averroes’ commentaries is underlined by Ivry 2001: 65, 71.

⁴¹ This corresponds to Themistius 1899: 91.7–97.27; Themistius 1973: 160.5–166.16; cf. Lyons’ introduction in Themistius 1973: xiii–xiv; Gätje 1977.

⁴² There is nothing in the preserved Arabic text corresponding to the argument described above. See especially Themistius 1973: 165.4–166.1. Lyons (Themistius 1973: xiv n. 17) had already supposed that Avicenna possessed the original text of Themistius; this was doubted by Gätje 1977: 279–80, 290–91. For the further example of Averroes’ access to the original, see note 55.

⁴³ A strictly literal rendering of the anonymous Arabic translation would read something like this (Averroes 1954a: 73.18–20, corresponding to 429b14–18; numbers refer to the three cases

The most important point, finally, concerns the philosophical basis for this threefold distinction. It appears quite justified in light of the fact that Aristotle's text leaves a gap, not clearly recognized by virtually all ancient and modern interpreters,⁴⁴ between the respective tasks of sense-perception and intellect, on the one hand, and the different objects of cognition treated in this section, i.e. the compound and the essence, on the other hand. A fairly neutral translation of Aristotle's line analogy reads:

One discerns by means of the sensitive [part of the soul] the hot and the cold and those things of which flesh is a certain proportion [λόγος], while it is by means of something else – whether separate or whether related as is a bent line to itself when straightened out – that one discerns what it is to be flesh.⁴⁵

The gap occurs between the apprehension of primary qualities like hot and cold, ascribed to sense, and the apprehension of the essence. The apprehension of the compound, "flesh," is not explicitly mentioned any longer; rather, it is tacitly analyzed into the two components of flesh, form and matter, for the primary qualities "of which flesh is a certain λόγος" must for that very reason be the matter of flesh. Sense-perception is thus presented as that by which only the matter of enmattered forms is apprehended, while intellect as such knows only forms or essences. In order to apprehend enmattered forms like flesh, however, intellect needs to

distinguished by Averroes in the passage of *Paraph. On the Soul* quoted earlier, note 34): "And [=2] by sense-perception it judges the warm and the cold, and in lieu of reason [=1] it says what is the part of flesh and [=3] judges the difference [*yagḏī 'alā l-ghayriyya*], either [=1] as something separate or [=3] like the bent line [compared] to itself when it continues [*marra* probably misread for *madda*, "stretches"]; like that is his judgement of that which belongs to the part of the flesh." The translator probably had intended the expression *yagḏī 'alā l-ghayriyya* in the sense of "it judges according to difference," in order to express the Greek dative ἄλλω, meaning "as something different." But inasmuch as the verb *yagḏī* is always paired with the preposition 'alā to indicate the object, Averroes quite naturally took it in this way.

⁴⁴ See e.g. (Pseudo-)Simplicius 1882: 232.13–24 and (Pseudo-)Simplicius 2000: 97; Zabarella 1609: 835D–E; Aristotle 1907: 488–89; and Polansky 2007: 449, who all notice that compound substances can only be accidentally apprehended by the senses but then suppose that this is the function of sense to which Aristotle alludes.

⁴⁵ *On the Soul* III. 4, 429b14–18, translation from Lowe 1983: 20; I have changed his "judge" to "discern" in order to capture the different notions present in κρίνει; I have not adopted Lowe's alternative translations for the not explicitly named subject of κρίνει, namely besides "one," i.e. the cognizing person or the soul, "it" standing for the intellect. Lowe and others believe the interpretation hinges on correctly deciding between these two possibilities. For reasons I cannot go into here, however, this seems to me to make no fundamental difference. In any case, both Themistius and Averroes take the soul as the subject that apprehends by means of sense or intellect, and yet consider the intellect as the subject that apprehends different objects when differently disposed; cf. e.g. the first-person plural in Themistius 1899: 96.9–13, and *anima* as subject in *LC On the Soul* 422.56, 60 (Bk. 3, comm. 9), 423.8 (Bk. 3, comm. 10), 425.19 (Bk. 3, comm. 11).

apprehend both their form and their matter. By making use of sense, the intellect is “bent” from its “straight” function toward matter. In its apprehension of compounds, the intellect thus assumes two different tasks, only one of which is proper to it.

While here is not the place to argue in defense of this interpretation, it is instructive as well as important in the present context to see how Averroes’ imperfect grasp of the three possible objects of knowledge – matter, form, and compound – leads him into unresolved contradictions. Both in the *Paraph.* and *LC On the Soul* Averroes makes the individual thing (*individuum*, *shakhṣ*) the object apprehended by sense-perception when operating on its own. In the *LC* he first introduces the *individuum*, as opposed to *intentio* or *forma*, to designate the compound, but then, immediately afterward, speaks of *individuum* and *forma* as “two intentions” (*duas intentiones*) and assigns the apprehension of “the individual separately” (*individuum singulariter*) to sense.⁴⁶ Then again Averroes passes without any qualms from the opposition between hot and cold, on the one hand, and “that by which flesh is what it is,” on the other hand, to the opposition between “individual intention” and “universal intention” as if these two oppositions did coincide.⁴⁷ Yet, as Averroes had explained in his comments on accidental perception, the *intentio individualis*, albeit apprehended by the senses in addition to the primary sensible qualities, can only thus be apprehended because the senses of human beings operate under the influence of intellect.⁴⁸ Thus, according to Averroes’ own admission, the individual substance cannot be apprehended by the senses alone. If this were the case, his carefully distinguished three cases would again collapse into two with two rival accounts of the knowledge of form–matter–compounds, either by sense alone or by intellect making use of sense.

Up to this point the *LC On the Soul* has been seen to be in full agreement with the *Paraph.* However, in the *Paraph.*, the simile of the line is, much as in Themistius’ paraphrase, only an illustration of the two states of intellect distinguished before, namely its operation in conjunction

⁴⁶ *LC On the Soul* 421.19–23, 28–29 (Bk. 3, comm. 9).

⁴⁷ *Ibid.*, 423.13–424.18 (Bk. 3, comm. 10).

⁴⁸ Cf. *ibid.*, 225.39–56 (Bk. 2, comm. 63), 228.32–51 (Bk. 2, comm. 65) where he says: *videtur enim quod comprehensio intentionum individualium substantiarum, de quibus intellectus considerat, est propria sensibus hominis*. Already Aristotle explains that the so-called accidental sensibles are not sensed; cf. *On the Soul* II. 6, 418a20–25; III. 1, 425a21–27. On the individual intentions and Averroes’ indecision as to which faculty apprehends them, see also Wirmer 2004: 64–65.

with sense, symbolized by the bent line, and its independent operation, symbolized by the straight line.⁴⁹ This changes radically in the *LC*; Averroes now identifies the straight line with the apprehension of enmattered forms and finds a new function for the other “bent” state of the intellect:

Then he said: “And it inspects in virtue of something else or according to the state of a line,” and so on. That is, it is necessary that it inspects the form in virtue of another faculty. This will be the case for this faculty [3*] either by a state resembling a straight line – when it intellects the first form that exists in this individual thing – , or [1*] by a state resembling a bent⁵⁰ line, when it is turned,⁵¹ trying to intellect also the quiddity of that form, then the quiddity of that [latter] quiddity, until it attains a simple quiddity in that thing.⁵²

Thus, while the *Paraph. On the Soul* attributes the straight line to the apprehension of form alone [1], the bent line to the apprehension of form in matter [3], the *LC* reverses the scenario and attributes the straight line to the apprehension of form in the individual material thing [3*], and the bent line to the apprehension of an abstract quiddity [1*], apprehended via a (continued) reflection on the enmattered form that was grasped in the first cognitive act. As already Jacopo Zabarella very perceptively remarked, Averroes thus attributes both states of the intellect, the bent and the straight, to the knowledge of essences, whereas Aristotle precisely wants to illustrate the difference between the knowledge of essences and the

⁴⁹ Cf. Averroes’ text quoted above with Themistius 1899: 96.19–27.

⁵⁰ The Latin text has *spiralis*, but this is a mistranslation by Michael Scotus of *mun’atīf* (or *mun’atāf*?), as already suggested by de Libera in Averroes 1998b: 248 n. 314. Evidence is provided by *Paraph. On the Soul* and the findings concerning the *LC*, detailed later in note 58. De Libera further reasons in Averroes 1998b: 248–49 nn. 315 and 319 that the Arabic translation has pushed Averroes in the direction of a reflexive interpretation. In this he seems to be himself misled by the Latin text. Averroes’ own interpretation in *Paraph. On the Soul* shows that a nonreflexive reading was not only possible but more readily available to him.

⁵¹ I have no definitive explanation for the words “when it is turned” or, in Taylor’s translation, “when it has been turned about” (*quando fuerit reversa*). It is virtually certain that the phrase translates the Greek *ὅταν ἐκταθῇ*; the latter, however, is rendered as *quamdiu durat* in the lemma and later paraphrased by Averroes himself as *dum erit possibile*; cf. *LC On the Soul* 423.5, 424.34–36 (Bk. 3, comm. 10). The anonymous Arabic translation, as we saw earlier (note 43), has *idhā marra*, “when it continues/repeats,” and originally probably *idhā madda* “when it stretches.” In other Averroes translations, not by Michael Scotus, however, *quamdiu durat* renders *mā dāma*; cf. e.g. Averroes 1949: 90 (versio Parisina) with Averroes 1972c: 63.7–8.

⁵² *LC On the Soul* 424.21–29 (Bk. 3, comm. 10), my translation; the next lines, 424.29–36, continue to describe the reflexive process by taking “the quiddity of flesh” as starting point and “a simple form” as end point.

knowledge of individual substances.⁵³ Zabarella suggests that Averroes simply had a bad manuscript, but we know from the different interpretation in the *Paraph.* that such an explanation is much too weak. We will have to discover the philosophical reasons for Averroes' shift in the *LC*.

Reflexive Knowledge: Twisting Aristotle's Straight Line

In order to explain Averroes' revised interpretation of Aristotle's simile of the line, we have to take into account a textual element not hitherto sufficiently appreciated. Again it is provided by Themistius. Themistius, after paraphrasing the analogy, adds a reference to Plato's *Timaeus* and, by this intertextual note, most likely reveals the subterranean connection on which Aristotle plays; Themistius writes: "Plato likens the activities of the intellect to the 'smooth-running' and 'straight[-running]' [circles], but Aristotle compares them to a line that is both bent and straight, since the intellect becomes as it were double instead of single when it inspects the matter along with the structure."⁵⁴ Themistius is the only ancient commentator who makes this connection, and thus most certainly is the source of Averroes' similar remarks in the *LC On the Soul*.⁵⁵

The terms that appear in the Latin text of Averroes when he describes Aristotle's and Plato's similes, respectively, are *linea spiralis* and *linea girativa*.⁵⁶ The *spiralis* of which Aristotle apparently spoke is nothing but a mistranslation of Arabic *mun 'atīf*, "bent," a term that is attested not only by the *Paraph. On the Soul*⁵⁷ but also by a yet unedited Arabic fragment of the *LC* that covers a part of the passage that we are about to analyze.⁵⁸ The *girativa*, however, that translators have so far rendered as "circular,"⁵⁹

⁵³ Zabarella 1609: 816D: "Quae Averrois expositio est omnino dimittenda, cum innitatur codici depravato; nam mens Aristotelis est, quod linea recta et linea flexa assimiletur utrique cognitioni, non alteri solum, videlicet una cognitioni carnis, altera cognitioni quidditatis carnis."

⁵⁴ Themistius 1899: 96.27–30; English at Themistius 1996: 120. The reference is to Plato, *Timaeus* 37b–c. It should be remembered that already in *On the Soul* I.3, 406b26–407b26, Aristotle critically discusses Plato's account of soul and intellect in the *Timaeus*, and in this context tries to show that the progress of thought resembles more a straight line than a circle; cf. in particular 406b26–407a9 and 407a19–34.

⁵⁵ Cf. Averroes 1998b: 252 n. 330. ⁵⁶ *LC On the Soul* 425.27–29 (Bk. 3, comm. 11).

⁵⁷ See notes 34 and 50.

⁵⁸ The Judeo-Arabic fragment occurs in the lower bottom margin (middle) of MS Modena, Biblioteca Estense Universitaria, α. J. 6.23, fol. 56r; it corresponds to parts of *LC On the Soul* 425.23–29 (Bk. 3, comm. 11) and reads: *yajibu a[n] t[a'lama] anna l-ḥāla al-mawjūda li-l-'aql alladhī takbtalifu fīhi min qibali idrākīhi / māhiyyat al-māhiyya wa-ṣūra hiya ḥāla mukbtalifa fī nafsihā lā min qibali l- / ḥawāss wa-li-dhālika yushbihuhu Aristū bi-l-khaṭṭ al-mun 'atīf fī ḥādhihi l-ḥāla*. On the fragments preserved in this manuscript, see Averroes 2005.

⁵⁹ Averroes 1998b: 93; Averroes 2009: 339.

seems instead to translate *lawlabiyya*, which, as it happens, signifies “spiral.” The evidence for this latter identification comes from three sources. First, there is another passage from the *LC* for which an Arabic fragment has been preserved, and where *lawlabiyya* is likewise translated as *girativus*.⁶⁰ That *girativus* (or *gyrativus*) was Michael Scot’s standard translation for *lawlabī* is further documented by the famous cosmological passage from Averroes’ *LC Metaphysics*, book Lambda.⁶¹ Second, as we will shortly see, Averroes was not the first to pick up Themistius’ reference to Plato. Before him, Ibn Bājja, in a little-known treatise *On Unity and the One*, had already referred to Aristotle’s and Plato’s similes, and the one there ascribed to Plato likens the action of intellect to a “spiral line” (*khaṭṭ lawlabī*) or to “spiral circles” (*dawā’ir lawlabiyya*). A third, less direct yet nonetheless important piece of evidence is constituted by Neoplatonist interpretations of the respective passage from the *Timaeus* and a similar one occurring in the *Phaedrus*. In some writings these passages are indeed used in order to distinguish three types of intellectual cognition symbolized by a straight line, a spiral line, and a circle, respectively.⁶²

This in mind, we can now examine Averroes’ own exposition in the *LC On the Soul* of the similes used by Aristotle and Plato:

One should know that the different state which the intellect has when it apprehends the primary sensible forms of things, belongs to it because of the senses, whereas **the different state which the intellect has when it apprehends the quiddity <of quiddity> and the form <of form> is a different state** [which belongs to it] **in itself, not because of the senses. For that reason Aristotle likened it to the bent line in this state**, while Plato [likened it] to the spiral line; and in this state it intellects the forms of mathematical things, in as much as it does not, when intellecting these, receive a sensible magnitude.⁶³

⁶⁰ Compare *LC On the Soul* 525.3 (Bk. 3, comm. 55) with the fragment from MS Modena quoted by Taylor in Averroes 2009: 424 n. 344.

⁶¹ Compare *LC Metaphysics* 1669–70 (Bk. 12, comm. 47) with Aristotle 1962: VIII.331D–F; cf. also Hasse 2015: 74–75.

⁶² Cf. Gersh 1978: 73–76, and the literature mentioned there at 75 n. 229. See also Menn 2012.

⁶³ *LC On the Soul* 425.23–31 (Bk. 3, comm. 11), my translation. The parts printed in bold type are attested in the Arabic; cf. note 58. The words between angle brackets do not appear in the text edited by Crawford, however, they are attested by two Latin manuscripts (D and G) mentioned in the apparatus and, in the first case, the corresponding Arabic fragment. This might seem a rather slight basis for emending the text, but given the parallel passage in the preceding *commentum* that repeatedly uses the expression *quiditatem istius quiditatis* (cf. above, note 52), the intervention appears to me justified, especially if one keeps in mind that Crawford’s edition lacks a thorough examination of the entire manuscript tradition. I thank Matteo Di Giovanni for his cautioning remarks on this score.

On the face of it there is nothing here that would distinguish Averroes' account of the knowledge of essences from the argument by al-Fārābī and Ibn Bājja mentioned in the "Introduction" section. A first intellectual act directed at "the primary sensible forms of things" (*formas rerum primas sensibiles*) or, as formulated above, "the first form that exists in this individual thing" (*primam formam existentem in hac re singulari*) is followed by one or more reflexive acts directed at the form apprehended before. The quiddity of that form is abstracted, and this latter apprehension is entirely free from sense-perception; the act belongs to the intellect alone. Averroes' formulation above that through this reflexive cognition a "simple form" is reached (*quousque perveniat ad formam simplicem*) apparently has to be read together with his interpretation of Aristotle's remark that not all things are different from their essences. As Averroes explains, "simple things" (*res simplices*) that are not composed of matter and form exhibit this characteristic.⁶⁴

Plato's comparison with a spiral line underscores the possibility for the intellect to repeatedly reflect on the result of the preceding intellectual act. However, this comparison alone cannot be considered as Averroes' reason for inventing the reflexive interpretation. For one thing, Aristotle's bent line is taken to express exactly the same reflexive intellection hinted at by Plato's spirals. What is more, Themistius' paraphrase was seen earlier to have informed already the interpretation offered in the *Paraph. On the Soul*, and there Averroes correctly understood the bent line to refer to intellect's cooperation with sense-perception.

Not Themistius' comments on the Aristotelian text but the use these were put to by Ibn Bājja gave rise to Averroes' new interpretation in the *LC*. In his treatise *On Unity and the One* (*Fī l-waḥda wa-l-wāḥid*) Ibn Bājja pursues the same question already discussed in his more famous epistle *On the Conjunction of Intellect with Man*: "We have to examine the one, its kinds, and in how many ways it is said, because this introduces the doubt concerning that which has been explained concerning the intelligibles, namely that they are one, and that Aristotle and al-Fārābī, for example, are one and the same."⁶⁵ In *On Conjunction* Ibn Bājja tries to show that not all intelligibles are identical for each and every knower but only the one intelligible that is the (agent) intellect itself. The latter can be apprehended

⁶⁴ *LC On the Soul* 421.25–422.32 (Bk. 3, comm. 9). See *On the Soul* III. 4, 429b12, and cf. Aristotle 1907: 486; Themistius 1899: 96.5–8.

⁶⁵ Ibn Bājja 1973: 141–46, here 141.1–2; Ibn Bājja 1983: 140–49, here 140.1–2. For Ibn Bājja's question and argument, cf. Wirmer 2014: 35–40 and 647–53.

by considering the intelligibles of physical substances insofar as they are “one of the beings in the world” and abstracting from them the intellect as their “intention.”⁶⁶ The treatise *On Unity* describes the same reflexive move by appealing to Aristotle’s simile of the bent line:

Let us consider [the “one”] that pertains to the intelligibles. Now, the intelligible “one” is constituted from two intelligibles, one behaving like matter, and the other behaving like form. This is not unlike what exists in the intellect, for the intellect is sometimes subject because the subject and the predicate are related one to the other in this way, and the predicate is the form of the subject. Now, sometimes this predicate is [itself again made] a subject, like the middle term in [a syllogism of] the first figure. How beautifully did Aristotle liken it to the straight line, of which one part has been folded on the other [*al-khaṭṭ al-mustaqīm al-munṭawī ba’dubu ‘alā ba’d*!]. And to this idea did Plato refer when he likened it to spiral circles [*dawā’ir lawlabiyya*]. If we assumed that this happens concerning every intelligible, then there would follow from this the simultaneous existence of the infinite, and this is no doubt impossible. Thus we will necessarily attain at the end – if God wills – an intellect which cannot be made subject and be made into something, rather [the fact] that it intellects is his essence, so that in him the intentions of intellect and intelligible are one.⁶⁷

Ibn Bājja here argues that each intelligible is composed of two intelligibles, for the same concept can appear as a subject that is elucidated by another concept, and as a predicate that does the explaining and provides new knowledge of a subject. In the middle term of a scientific syllogism both aspects come together in a single concept and are thus one. Therefore, scientific reasoning proceeds in spirals to successively higher concepts that provide more and more fundamental explanations. Unless this process ends with one intelligible that cannot again be made the subject of a further one, scientific reasoning would not be possible. The process therefore has to end with an intelligible that is by itself intellect and intelligible.

Further passages from *On Unity* detect similar reflexive structures, for instance in two levels of intellectual development.⁶⁸ The first level corresponds to the straight line and is characteristic of human thinking at the pre-theoretical stage. As Ibn Bājja explains, this is the case when the human being is able to use all simple concepts falling under the categories correctly; he is then using intelligibles but not reflecting on them.⁶⁹ At the

⁶⁶ Cf. Ibn Bājja 2010: 191.5–192.9, 194.13–195.19.

⁶⁷ Ibn Bājja 1973: 142.23–143.11; Ibn Bājja 1983: 143.5–144.2.

⁶⁸ For this and the following, see Ibn Bājja 1973: 145.1–9; Ibn Bājja 1983: 146.2–10.

⁶⁹ On this point, see the passage quoted in Wirmer 2014: 108 n. 84.

theoretical level, by contrast, man combines intelligibles and construes syllogisms in the way just described; he reasons reflectively or “along a spiral line” (*‘alā khaṭṭ lawlabī*). In a formulation that alludes to al-Fārābī’s arguments in the *De intellectu*, and which we have already encountered before, Ibn Bājja says that in the reflexive state man “makes the intellect into something existing” (*shay’ mā maujūd*); that is, he “puts it in the position of the material beings.” That is to say, inasmuch as the human intellect is nothing but the intelligibles it thinks, reflecting on intelligibles means treating them, and by implication the intellect itself, as the primary material objects. At this stage man thinks no longer this and that object but the intellect itself.

Finally, Ibn Bājja explains which content is thought in the final reflective act.⁷⁰ While the consideration of the intelligible in its “material existence” (*wujūduhu al-hayūlānī*) in the individual makes known the definition (*ḥadd*) or essence of that individual, the consideration of the intelligible in its “intelligible existence” (*wujūduhu al-ma‘qūl*), that is to say as something that has already been thought and insofar as it has been thought, yields a quite different result. When you consider the intelligible qua intelligible, it makes no difference whether this is the intelligible of a chair or of a human being. Essentially, insofar as they are intelligibles, they are only one identical thing, namely actual intellect. This mode of apprehension is what is meant by Aristotle’s “folding of the straight line” (*inthinā’ al-khaṭṭ al-mustaqīm*) and Plato’s “spiral circles” (*dawā’ir lawlabiyya*).

As far as appears from our analysis so far, Averroes in the *LC On the Soul* has relinquished his previous understanding of Aristotle’s line analogy under the influence of Ibn Bājja. While the *Paraph.* construes the bending of the line as a deviation from the cognition most proper to intellect under the influence of sense-perception, the *LC* follows Ibn Bājja in interpreting the bending of the line as a progressive liberation from sense-perception via reflection. What, however, is Averroes’ philosophical motivation? And does he really say the same thing as Ibn Bājja?

Two Kinds of Reflexive Thought: Correcting Ibn Bājja

Averroes’ account of our intellectual cognition of individual things and their essences in the *LC* admits of a very different interpretation if we

⁷⁰ Ibn Bājja 1973: 145.13–146.2; Ibn Bājja 1983: 147. 3–16. For a similar argument in Ibn Bājja’s *Book of the Soul*, cf. Wirmer 2014: 724–25 (§18).

respect the order of exposition and closely follow all the steps taken. In *commentum* 9 Averroes presents the trifold distinction of cognitive acts that has been analyzed earlier in the section on “*Paraph.* and *LC On the Soul.*” The two different acts attributed to the intellect are the apprehension of the form “by itself” and the apprehension of the individual “by means of sense-perception;” when it realizes both of these acts together, the intellect grasps the “difference” (*alietas*) of these two “intentions.”⁷¹ Our criticism of Averroes’ ambiguous use of *individuum* notwithstanding, it remains true that he has preserved here the structure that, in the *Paraph.*, was explained with the correct interpretation of the bent line. The structure in question is one in which the intellect assumes two different tasks and was therefore best represented by the line that has doubled up. Now, in the *LC* the idea that the intellect is, so to say, “multiple” (*multa*) when it apprehends individual things, i.e. forms in matter, has been kept but dissociated from the line analogy, which does not appear in *commentum* 9 at all.

What is more, the independent activity displayed by the intellect when it apprehends “the form separately”⁷² is not identified with the knowledge of essences of material substances like flesh as was done in the *Paraph. On the Soul*. Rather, Averroes ends *commentum* 9 by explaining that “the two intentions,” form and *individuum* or matter, can only be apprehended by the intellect in its double state because forms like the form of flesh, “sensible forms,” are never separate from matter.⁷³

The first half of *commentum* 10 repeats the argument already developed in *commentum* 9, i.e. that different intentions have to be apprehended by different faculties.⁷⁴ This could give the impression that Averroes still understands the line analogy, introduced in the second half of *commentum* 10, as an explanation of the difference between the knowledge of individual things and the knowledge of essences as he did in the *Paraph.* In fact, however, as we noted earlier in the section on “*Paraph.* and *LC On the Soul*” and as was pointed out by Zabarella, Averroes now takes the line analogy to describe two different ways of knowing essences. As his opening and closing remarks show, Averroes in the *LC* conceives of the whole passage of *On the Soul* 429b10–22 as a proof for the difference of intellect from imagination. This idea may be based on Themistius, who twice in the present context mentions the imagination as that which only renders

⁷¹ Cf. again *LC On the Soul* 422.39–50 (Bk. 3, comm. 9).

⁷² Ibid., 422.21 (Bk. 3, comm. 9); *formam singulariter* = ‘*alā hida*, cf. note 33.

⁷³ Ibid., 422.56–423.69 (Bk. 3, comm. 9). ⁷⁴ Ibid., 423.6–424.18 (Bk. 3, comm. 10).

the intellect capable of apprehending individual things instead of essences.⁷⁵ The proof, as Averroes explicitly states, has really been accomplished at the end of the first half of *commentum* 10.⁷⁶

Thus the second half of *commentum* 10, including the line analogy, introduces a new aspect. Starting with the now established premise that only the intellect can apprehend essences, Averroes takes the line analogy as a description of two possible ways in which the intellect may know essences. The first way, resembling the straight line, is the apprehension by intellect of “the first form that exists in this individual thing.” We have to give its full weight to this formulation. It clearly describes the cognitive act in which intellect cooperates with sense-perception, but this standard activity of intellect, with respect to forms that do not occur without matter, is now shown to be a knowledge of essences, not of individuals. Unlike the *Paraph. On the Soul* then, the *LC* argues that the knowledge of essences is not reserved to the intellect untarnished by sense-perception but, to the contrary, in many cases is obtained by means of sense-perception. In this respect the *LC* agrees with Ibn Bājja, who associated the straight line with quidditative knowledge of material beings and who, as we saw, considered all intelligibles, apart from the agent intellect, as indissolubly linked to sense-perception.

Averroes also adopts Ibn Bājja’s reading of the bent and spiral line as description of a further, reflexive act of cognition that apprehends the essence of the first type of essences. However, Averroes deviates from Ibn Bājja inasmuch as he does not propose *one* additional step where we would apprehend the essence of intelligibles in general, as suggested by Ibn Bājja. Rather, according to Averroes, we may intellect “the quiddity of that form” (*quidditatem illius forme*), namely the very primary form known in the first step. And the process does not stop there but rather proceeds to “the quiddity of that [latter] quiddity, until it attains a simple quiddity *in that thing*” (*in illa re*).⁷⁷ These last words are of prime importance; they clearly indicate that the whole abstractive process is confined to the elucidation of the first form. There is no jump to the transcendental level, and that is why the process can go on for a while, depending precisely on the composite character of the first form: “The intellection of the intelligible will take

⁷⁵ Ibid., 421.9–18 (Bk. 3, comm. 9); 426.8–9 (Bk. 3, comm. 12); cf. Themistius 1899: 96.11–13, 19–21.

⁷⁶ *LC On the Soul* 424.18–21 (Bk. 3, comm. 10). ⁷⁷ Ibid., 424.25–29 (Bk. 3, comm. 10).

place in a similar way concerning flesh as long as it is possible *in flesh* that its quiddity may have a quiddity.”⁷⁸

This might be called a demythologization of Ibn Bājja’s interpretation of the line analogy. The possibility to apprehend the quiddity of a first-order concept certainly exists, but the analytical process thus begun only leads to the further clarification of the first-order concept and not to knowledge of the active intellect. As Zabarella correctly saw, what Averroes has in view is a kind of analysis of concepts where the concept of “animal,” for example, is examined as part of the quiddity of the concept of “man.”⁷⁹ The more simple and general concepts reached through this reflexive thinking remain specific to the first concept. While our quote from Ibn Bājja’s *On Unity* could lend itself to such an interpretation, his further claims skip the analysis of concepts and syllogisms and pass from first-order concepts directly to the agent intellect as the common quiddity of these concepts. Thus one might say, perhaps, that Averroes has developed a not totally integrated aspect of Ibn Bājja’s argument into an argument against Ibn Bājja.

Unlike Ibn Bājja then, and most probably in conscious opposition to him, Averroes places the knowledge of higher-order concepts, essences that are not immediately essences of material beings, in science, not in an act that transcends scientific thinking. Ibn Bājja had claimed that, according to Aristotle’s simile of the bent line, intelligibles may be considered insofar as they are intelligibles so that it makes no difference whether you are examining the intelligible of a chair or of a man. In both cases you would apprehend as their quiddity pure intelligibility, i.e. the active intellect. Averroes, to the contrary, insists that it is impossible to lose sight of the content of your primary concept; the intellect remains chained to sense-perception.

From this point of view, it makes perfect sense for Averroes to revise his first interpretation of the line analogy, presented in the *Paraph. On the Soul*. For the theory of the *Paraph.* at this place accords the intellect independent access to the form inasmuch as it construes the apprehension of form as an act of unmediated intellection resembling the straight line, while the apprehension of the form in matter associated with the bent line

⁷⁸ Ibid., 424.34–36 (Bk. 3, comm. 10).

⁷⁹ Cf. Zabarella 1609: 816C–D: “Cum autem eam quidditatem resolvit in aliam quidditatem et quaerit quidditatem quidditatis, ut cum quaerit definitionem animalis positi in hominis definitione, donec ad simplicissimam quidditatem perveniat, tunc comparatur lineae flexae.” This reinterpretation of Ibn Bājja by Averroes might explain Thomas Aquinas’ misunderstanding of Ibn Bājja, described in Wirmer 2006: esp. 581–83.

appears to be an always reversible deviation of intellect toward sense-perception. Such an interpretation cannot counter Ibn Bājja's claims, as Averroes wishes to do in the *LC*. If anything, the *Paraph.* interpretation is guilty of an even worse kind of intellectualism.⁸⁰ Thus Averroes' reflexive account of the way we know some (though not the primary) essences, instead of supporting the impression that he reifies intelligibles, in fact testifies against it.

⁸⁰ This is also what results from Averroes' criticism of Themistius' account of the habitual intellect in *LC On the Soul* 448.127–32, 452.257–72 (Bk. 3, comm. 20), which basically agrees with his own account in *Paraph. On the Soul* 111.17–112.14, 117.8–13, but the latter passage is problematic; see Wirmer 2008: 347–48 n. 247. Averroes charges Themistius with a Platonism that implies that *intellecta existentia in nobis sunt eterna*.

*Averroes and the “Internal Senses”**

Rotraud Hansberger

The “Internal Senses”: Averroes and Avicenna

One of the points Averroes finds fault with in Avicenna’s thought is the latter’s theory of the so-called internal senses, and in particular his concept of *wahm*, the “faculty of estimation,” which famously is supposed to account for the ability of animals to perceive, e.g., that certain things are harmful or beneficial for them. Averroes regards this faculty as superfluous. He voices this criticism explicitly in his *Incoherence of the Incoherence* (*About the Natural Sciences*, 2nd discussion), where he comments on al-Ghazālī’s account of the faculties of the animal soul with the following remark:

TI In all of this, there is nothing but an account and a representation of the philosophers’ doctrine of these faculties; only he followed Avicenna in this, who is at variance with the [other] philosophers in that he sets up another faculty than [just] the imaginative (*al-mutakhayyila*) in animals, in the place of the cogitative faculty (*al-fikriyya*) in humans, calling it [the] estimative (*wahmiyya*) [faculty]. He says that the ancients supposedly apply the term “imaginative faculty” to this [i.e. the estimative] faculty, and whenever they do this the imaginative faculty in animals is a stand-in for the cogitative faculty [in humans] and is located in the middle ventricle of the brain, whereas when the term “imaginative faculty” is applied to that [faculty] which is specifically concerned with the form (*shakl*), it is said to reside at the front of the brain.¹

According to Averroes, this is not in line with the philosophical doctrine of the Greeks:

* A previous version of this chapter was presented at the workshop “Interpreting Averroes” held in Munich in October 2015. I thank the participants for an engaging discussion and helpful comments.

¹ *Incoherence of the Incoherence* 546–47, English at Averroes 1954b: I.336 (modified). In quotations of primary sources, square brackets indicate additions to the translation; angle brackets indicate additions supplied to the Arabic text.

T2 What is apparent from the doctrine of the ancients is that the imaginative faculty (*al-mutakhayyila*) in animals is what determines that for the sheep, the wolf is [to be taken as] an enemy, while the lamb is [to be taken as] a friend; for the imaginative faculty is a perceptive (*darrāka*) faculty and thus necessarily possesses judgment, without there being any need to introduce another faculty. What Avicenna says would only be possible if the imaginative faculty were not perceptive; hence there is no sense in adding another faculty to the imaginative in animals.²

Averroes’ critical stance on this aspect of Avicenna’s psychology is indirectly also expressed by his own account of those faculties of the animal soul that are usually called “internal senses” – a term that, incidentally, is not used by Averroes and found only rarely in Avicenna: both speak of “internal faculties (*quwā*)” instead.³ The most explicit and detailed presentation of these faculties as a group is found in Averroes’ *Talkhīṣ Kitāb al-Hiss wa-l-mahsūs*,⁴ an explanatory paraphrase of the Arabic adaptation of Aristotle’s *Parva Naturalia*.⁵ It displays a number of differences to Avicenna’s five internal faculties. The latter’s system comprises the common-sense faculty (*al-ḥiss al-mushtarak* or *fanṭāsiyā*), responsible for the overall perception of sense objects; the formative faculty (*al-muṣawwira*, *al-mutakhayyila*, *al-khayāliyya*, *al-khayāl*),⁶ which is in fact retentive imagination, i.e. has the function of storing a perceptual form in the

² *Incoherence of the Incoherence* 547, English at Averroes 1954b: I.336 (modified).

³ The term “internal senses” (*al-ḥawāss al-bāṭina*) does appear prominently, though, in the relevant chapter headings of Avicenna’s *Cure* (*al-Shifāʾ*) and *Salvation* (*al-Najāt*), though it remains unclear to me how much authority can be attributed to these headings. The term is used in other, earlier texts where most often, though not always, five internal senses are contrasted with the five external senses (e.g. Ps.-Apollonius, *Sirr al-khalīqa*, 1979: 2, 24; *Ikhwān al-Safāʾ*, 1957: II.384; ‘Alī b. Rabban al-Ṭabarī, *Firdaws al-ḥikma*, 1928: 76); the ready availability of the term may thus have contributed to its application to Avicenna’s system of five faculties, and thus to its general association with the mental faculties mediating between perception and intellection. In modern scholarship, these faculties are regularly discussed under the label “internal/inner senses” (cf. e.g. Wolfson 1935; Gätje 1965; Black 1993, 1996, and 2005; Taylor 1999; Hasse 2010), possibly also due to influence of the term *sensus interiores* used in the Latin tradition. Its common use and recognizability, as well as its intuitive appeal, are good reasons to continue its use, even though “inner faculties” (or “spiritual faculties”) would be the historically more accurate term, certainly in the context of Averroes.

⁴ Edited by H. Gätje in 1961 (= *Comm. Parva Naturalia*) and by H. Blumberg (= Averroes 1972c); an English translation by H. Blumberg is available in Averroes 1961.

⁵ This work has often been referred to as an “epitome,” probably due to its rather tentative relation to Aristotle’s Greek text. However, its relation to the (formerly unknown) Arabic adaptation of the *Parva Naturalia* renders its classification as an “explanatory paraphrase” (*talkhīṣ*), in accordance with the title it is given in the manuscripts, decisively less problematic. I would therefore tend towards referring to it as a “paraphrase,” but in this volume we adopt the neutral abbreviation *Comm. Parva Naturalia*.

⁶ Avicenna’s terminology varies. However, he distances himself from the use of the term *al-mutakhayyila* for this faculty (Avicenna 1952: 165) and, similarly, in the *Qānūn*, from the use of *takhayyul* (Avicenna 1877: I.72; see note 58 below).

absence of the external sense object; the cogitative (*al-mufakkira*) or imaginative (*al-mutakhayyila*) faculty, which combines and separates such stored forms, its differentiation in cogitative and imaginative depending on its being used by human reason or the (“animal”) faculty of estimation, respectively; the estimative faculty (*al-wahm*, *al-wahmiyya*, *al-mutawahhima*), which perceives a thing’s incorporeal, sensually imperceptible *ma‘nā* (“intention”)⁷ within its perceptual form; and, finally, the memorative faculty (*al-ḥāfiẓa* *al-dhākira*, *al-mu[ta]dhakkira*), which stores the *ma‘anī* perceived by the estimative faculty.⁸ Averroes, on the other hand, only acknowledges four such faculties: the common sense (*al-ḥiss al-mushtarak*), the formative or imaginative faculty (*al-mutakhayyila*, *al-khayāl*, occasionally *al-muṣawwir[a]*), the cogitative faculty (*al-mufakkira*, *al-mumayyiza*), and the memorative and recollective faculty (*al-dhākira al-ḥāfiẓa*). Moreover, the common-sense faculty does not really belong in the same class as the others: even though Averroes leaves no doubt concerning its role and importance, he does not usually group it together with the other three. Wherever he speaks of the post-sensory⁹ faculties as a group, he seems to be referring to the other three only, at times even addressing them explicitly as “three” faculties.¹⁰ This distinction is underscored by his understanding of their respective locations in the body, as he describes them in his *General Principles of Medicine* (*al-Kulliyāt fī l-ṭibb*): the imaginative, cogitative, and memorative faculties reside in the three ventricles of the brain, whereas the common sense, in good Aristotelian tradition, has its seat in the heart.¹¹ For Avicenna, by contrast, all five faculties are located in the ventricles of the brain, with common sense and retentive imagination sharing the front ventricle and the cogitative and estimative faculties sharing the middle one, while the memorative faculty occupies the rear ventricle.¹²

⁷ The term *ma‘nā* (pl. *ma‘anī*) appears in Avicenna and Averroes as well as their source, *Kitāb al-Ḥiss wa-l-maḥsūs* (see below). Even though their concepts of *ma‘nā* are related, using the most common translation, “intention,” would, I fear, unduly import aspects associated with that term into *Kitāb al-Ḥiss wa-l-maḥsūs* that cannot be presupposed there. I will therefore leave the term untranslated throughout this chapter. For difficulties attached to the term in *Comm. Parva Naturalia*, cf. also Black 1996: 166 n. 17; for a discussion of the term in relation to Averroes’ commentaries on *On the Soul*, see Wirmer 2004.

⁸ This rough sketch is based on Avicenna’s *Cure* (Avicenna 1959: 163–87) and *Salvation* (Avicenna 1985: 201–2; 1952: 31).

⁹ This term is used in Wolfson 1935.

¹⁰ *Comm. Parva Naturalia* 87; Averroes 1972c: 83; 1961: 48.

¹¹ Averroes 2008a: 191–93. Despite being localized in the brain, the other three faculties nevertheless are also connected to the heart, as he explains in *ibid.*, 209–10.

¹² Avicenna 1959: 167–68; 1985: 201–2; 1952: 31.

In modern scholarship, Averroes' concept of these "spiritual faculties" has usually been discussed in comparison with Avicenna's theory and under the assumption that Averroes' account is derived from that of Avicenna. Thus H. A. R. Wolfson describes Averroes' take on these post-sensory faculties of the animal soul as a "departure from the Avicennian type of classification";¹³ the differences between the two sets of faculties in both authors are explained as "omissions" on Averroes' part, hence suggesting that Avicenna's set is the standard and yardstick (even though Wolfson attempts to provide a philosophical rationale for Averroes' "omission").¹⁴ In her contribution to the *Cambridge Companion to Arabic Philosophy*, D. L. Black reports in a similar vein that "Averroes eliminates this [i.e. the estimative] faculty entirely in animals" and "reduces the total number of internal senses to four."¹⁵ Also, the notion of a specific type of perception devoted to *ma'ānī* is credited as such to Avicenna, with Averroes having reassigned this function of the unwanted *wahm* to other faculties.¹⁶ Again, in his notes to the *Incoherence of the Incoherence*, Simon van den Bergh declares himself puzzled by Averroes' criticism of Avicenna's interpretation of the ancients' theory of the imaginative and cogitative faculties (quoted above in T1):

T3 This sentence is rather confusing. Avicenna evidently does not think that the estimative faculty in the animal replaces the cogitative in man, nor could Avicenna mean (if indeed he said that the ancients called the estimative faculty the imaginative) that the estimative faculty and the imaginative are identical, as Averroës seems to imply, but only that the ancients did not distinguish clearly between them.¹⁷

Even though van den Bergh does not clarify this explicitly, it seems to me that he is referring to Avicenna's set of faculties throughout, again taking it as the standard. Looked at from this perspective, Averroes' critical remarks are indeed rather confusing: why would Avicenna want to suggest that the estimative faculty could replace the cogitative faculty, having clearly distinguished the functions of these two faculties? The same would

¹³ Wolfson 1935: 106.

¹⁴ "The fact that both compositive animal imagination and estimation are omitted indicates that he considered them, together with retention, as sub-functions of imagination"; Wolfson 1935: 108.

¹⁵ Black 2005: 315; cf. Black 1996: 164, and further *ibid.*, 171: "Averroes follows the general contours of the Avicennian paradigm."

¹⁶ "But Averroes does accept Avicenna's claim that the senses perceive 'intentions' as distinct from mere sensible forms. Averroes, however, believes that the perception of intentions is distinctive of human sensation, and he assigns it to the cogitative and memorative faculties"; Black 2005: 315.

¹⁷ Averroes 1954b: II.191.

also go for an identity between estimative and imaginative faculty. As we shall see later, Averroes' criticism becomes more intelligible once we let go of the assumption that Avicenna's set of faculties forms the reference point for Averroes' remarks.

There are, of course, obvious reasons to read Averroes' theory of the imaginative, cogitative, and memorative faculties against the foil of Avicenna's "internal senses." What should Averroes' point of reference have been here, if not Avicenna and his detailed and ambitious theory of these inner faculties? After all, Averroes acknowledges his awareness of Avicenna's theory openly. Moreover, despite their differences, the basic similarities between the two accounts are striking enough, especially in comparison with the other source that Averroes refers to in this context: Aristotle's *Parva Naturalia* (*Kitāb al-Hiss wa-l-mahsūs*, as it is known in Arabic).¹⁸ In Aristotle's discussion of imagination and memory we certainly do not find any such set of faculties located in the brain.

However, the very fact that Averroes' discussions of these faculties are, as a rule, associated with the Arabic version of the *Parva Naturalia*¹⁹ in itself provides a first hint that he did not rely merely on Avicenna for his account of the faculties of imagination, cogitation, and memory. That the text on which Averroes' paraphrase was based must have read quite differently from Aristotle's *Parva Naturalia* has long been assumed (and also transpires from that paraphrase itself). That he shared this source with Avicenna has likewise been suspected for a while;²⁰ H. Gätje, for example, voices this suspicion in an article devoted to the "internal senses" themselves.²¹ Nevertheless this thought seems to have had but little influence

¹⁸ *Incoherence of the Incoherence* 547; Averroes 1954b: I.336.

¹⁹ The most elaborate account is found in Averroes' *Comm. Parva Naturalia* itself; in other works Averroes refers to *Kitāb al-Hiss wa-l-mahsūs* in contexts where the internal faculties are mentioned, including that of T1 and T2 (*Incoherence of the Incoherence* 547); cf. *LC On the Soul* 415–16 (English at Averroes 2009: 331–32).

²⁰ In particular, this was argued in Pines 1974, where S. Pines compared passages from Averroes' *Comm. Parva Naturalia* with passages from *al-Risāla al-manāmiyya*, attributed to Avicenna. The uncertainty of this attribution may weaken Pines' argument, but does not undermine its result (i.e. the postulation of a common source), as it could just as well have been made on the back of Avicenna's *Cure* (albeit perhaps less elegantly).

²¹ "Hinsichtlich des Verhältnisses zum aristotelischen Text ähnelt diese Epitome der von *De anima*, nur liegt insofern ein Unterschied vor, als hier dem Aristoteles in krasser Form Lehren untergeschoben sind, die sich im Urtext nirgendwo finden. Da sich auch schon Avicenna für derartige Lehren auf die *Parva naturalia* des Aristoteles beruft, ist die Unzulänglichkeit der Vorlage erwiesen" (Gätje 1965: 264–65). As Gätje (anticipating Pines) refers to *al-Risāla al-manāmiyya* in this context, it seems that the idea of a common source was mainly based on the even more bluntly un-Aristotelian claims about veridical dreams that we find in both texts, rather than on the two philosophers' theories of the post-sensory faculties as such.

on the way in which Averroes' views on this topic (including his criticism of Avicenna) have been discussed. But then, in the absence of the common source itself, the extent to which it was responsible for the deviant doctrines in Averroes' *Comm. Parva Naturalia* would have been hard to gauge, while at the same time, Avicenna's theory of the "internal senses" would have presented itself as an obvious source.

Since in the meantime the Arabic version of the *Parva Naturalia*, *Kitāb al-Ḥiss wa-l-maḥsūs*, has come to light,²² we are now, fortunately, in a much better position to understand the roots of Averroes' stance on the post-sensory faculties, and the background to his criticism of Avicenna's doctrine of the "internal senses."

Averroes' Source: *Kitāb al-Ḥiss wa-l-maḥsūs*

We currently know only one manuscript that preserves *Kitāb al-Ḥiss wa-l-maḥsūs* (and only partly at that), MS Rampur Raza Library, Ar. 1752, fols. 7a–54b.²³ It is undated but assumed to have been copied in the seventeenth century.²⁴ Unfortunately, most of the first of its three treatises (*maqālāt*), the equivalent to *On Sense Perception and the Perceived*, is missing. Apart from that calamity, the often somewhat confused and untidy state of the text evokes the suspicion that it may well have suffered in the course of its transmission. Without more manuscript evidence, it may not be entirely possible to establish a definite version of the text. Notwithstanding these difficulties we can be certain that the text extant in the Rampur manuscript does represent the adaptation of Aristotle's *Parva Naturalia* that served as the basis of Averroes' *Comm. Parva Naturalia*, even if it may not have been identical down to the last letter. It contains exactly those deviations from Aristotle's original that can also be diagnosed in Averroes' paraphrase. For *Kitāb al-Ḥiss wa-l-maḥsūs* is in fact much more of an adaptation than a translation. We do not know who is responsible for the translation or the adaptation,²⁵ but judging from its language and character the adaptation is likely to have originated in the circle of al-Kindī,²⁶ even though it exceeds other Kindī-circle texts in the degree to

²² The text was identified by H. Daiber in 1985 in a manuscript in the Raza Library, Rampur, India; see Daiber 1986a: 39; cf. Daiber 1986b: 312 and 1997: 36–41.

²³ An annotated edition and translation is in preparation; a provisional edition and first study is available in Hansberger 2007.

²⁴ 'Arshī 1971: 534–35.

²⁵ Adaptor and translator were probably not identical; see Hansberger 2007: 131–35.

²⁶ Ibid., 212–20.

which it deviates from the original it is supposed to represent. There are barely any continuous passages of translation from the Greek left in the text; in many places it relates to its original in single key words only. Instead, the adaptation is dominated by additional material, which shows a general tendency toward Neoplatonizing metaphysics, on the one hand, and a strong influence of Galenic ideas, on the other.²⁷ The latter is manifest first and foremost in one of the adaptation's core theories, that of the three "spiritual faculties" located in the three ventricles of the brain: the formative faculty (*al-muṣawwir*), the faculty of thought or cogitation (*al-fikr*), and the faculty of memory (*al-dhikr*). The common-sense faculty, while also playing an important role as the origin of sense perceptions, does not, however, seem to be considered on a par with the other three (similarly to what we find later in Averroes), though there is some ambivalence and confusion on this point. The theory of these mental faculties pervades most of the second *maqāla*, i.e. those parts of *Kitāb al-Hiss wa-l-maḥsūs* that are equivalent to *On Memory and Recollection* and to the treatises *On Sleep and Waking*, *On Dreams*, and *On Divination through Dreams*, which the Arabic version combines to form one chapter, "On Sleep and Waking" (*Bāb al-Nawm wa-l-yaqāza*); in this latter chapter it provides the backbone to the adaptor's explanation of dreaming and, in particular, veridical dreaming. Another characteristic feature introduced into the text by the adaptor is a sharp dichotomy between "spiritual" and "corporeal," together with a predilection for strict hierarchies based on this distinction.²⁸ This creates a certain tension in the text's concept of spirituality, which only vaguely reflects the original medical notion of the (ultimately material) animal spirit. On the one hand, it seems to denote the intermediate realm between the corporeal world of sense-perception and the incorporeal world of the intellect, but on the other hand, it is set up as a direct opposite to corporeality and is practically equated with incorporeality.²⁹ This allows the adaptor to arrange the faculties and their respective objects (forms) hierarchically along a graded scale of spirituality versus corporeality, from the corporeal object of perception to the entirely incorporeal (though still particular) *ma'nā*, the purely cognitive content or "core" of the spiritual form derived from a perception.

Rather than setting out the theory of the three faculties in a clear and structured manner, the adaptation simply refers to it as if it could be taken

²⁷ Ibid., 16–17. ²⁸ Cf. Hansberger 2010.

²⁹ On this vacillating notion of spirituality, which is also found in other Graeco-Arabic texts from the circle of al-Kindī, see Endress 2012.

for granted. Its features therefore have to be extracted from various passages of *Kitāb al-Ḥiss wa-l-maḥsūs*.³⁰ Additional difficulties are presented by certain tensions and incongruities within the text, which, to the extent they were contained in his copy, would have confronted Averroes with interpretative problems, too (as we will see later).

In *Comm. Parva Naturalia*, Averroes does not follow his source text slavishly, though his dependence on “our” *Kitāb al-Ḥiss wa-l-maḥsūs* can be established on the grounds of some near-verbatim quotations, as well as the contents of the paraphrase in general. While we cannot estimate the exact quality of Averroes’ copy as compared with the extant *Kitāb al-Ḥiss wa-l-maḥsūs*, it is in any case discernible that in his paraphrase, he has expended some effort to create greater clarity, to render things intelligible that are obscure in the adaptation, or to fill in obvious gaps, sometimes by drawing on other Aristotelian writings, e.g. *On the Soul*, *On Generation and Corruption*, or the *Meteorology*.³¹

Within the limits of this contribution it will not be possible to analyze Averroes’ views on the “spiritual faculties” across the whole of the second *maqāla* of *Comm. Parva Naturalia*. In the following I will hence focus on a few pages of the first part of *Maqāla* 2 (on memory). They correspond to a passage in *Kitāb al-Ḥiss wa-l-maḥsūs* (quoted below in T7) where the system of the faculties is set out more explicitly and systematically than anywhere else in the text. Moreover, it is in the context of this passage that Averroes mentions Avicenna’s “estimative faculty” (*al-waḥmiyya*).

Averroes and *Kitāb al-Ḥiss wa-l-maḥsūs* on Memory and on Animals

In the section directly preceding our passage³² Averroes establishes that the function of memory and recollection (*dhikr / tadhakkur*) presupposes the activities of both the sense faculty and imagination: a memory is always a memory of a previous particular perception, and it always requires a mental image to go with it.³³ Nevertheless, the functions of the imaginative and the memorative faculty are different, as Averroes goes on to explain:

³⁰ Cf. Hansberger forthcoming (a) and (b).

³¹ For his way of proceeding in relation to the third *maqāla* (*On Length and Shortness of Life*), see Hansberger 2017: 64–68.

³² *Comm. Parva Naturalia* 42–43; Averroes 1972c: 38; 1961: 23.

³³ In her analysis of Averroes’ account of memory, D. L. Black (1996: 165–66) comments more extensively on the curious fact that Averroes gives up the Aristotelian idea that memory involves the awareness of the past *as past*. This is, in fact, one of the developments going back to Averroes’ source text; cf. Hansberger forthcoming (b).

T4 (1) For it is the function (*fi'l*) of the faculty of memory to make the *ma'nā* of the imagined thing present (*iḥḍār*) after it has been lost; and now to pass judgment on it that it is that very *ma'nā* which has been sensed (*uḥṣṣa*) and imagined [before]. (2) Thus, then, there are four things [involved]: an image (*khayāl*); the *ma'nā* of this image; [the act of] making this *ma'nā* present [again]; and judging that it is the *ma'nā* of the very same image that belonged to the previously perceived object. (3) Making the image present [again] therefore must be [a task] belonging to a faculty other than the faculty that perceives (*adraka*) the *ma'nā*. (4) This faculty exists in two states: when its perception (*idrāk*) is continuous, it is called “retaining” (*ḥāfiẓa*); when it is discontinuous, it is called “remembering” (*dhākira*). (5) In humans, the judgment that a particular *ma'nā* belongs to a particular imagined thing is a matter for the intellect, which, after all, is what passes affirmative and negative judgments in them, while in animals capable of memory it belongs to something that resembles intellect. (6) For in humans this faculty is present by virtue of thought and deliberation (*fikr wa-rawīyya*³⁴), which is why they can recollect [actively] (*tadhakkara*). (7) In all other animals, however, it is a nature (*ṭabī'a*), and therefore animals are only capable of memory, but not of recollection. (8) This faculty in animals does not have a name; it is the one that Avicenna calls the “estimative” (*al-wahmiyya*). (9) On account of this faculty animals naturally flee from what is harmful to them, even if they have never perceived it before; as e.g. many small birds flee from birds of prey, even though they have never seen them before.³⁵

Averroes need not have named Avicenna explicitly to give us the idea that he served as a source of inspiration at least for parts of this passage. However, Avicenna is not the only reference point here: Averroes' primary source is *Kitāb al-Ḥiss wa-l-maḥsūs*.³⁶ Looking at this text as well as the continuation of Averroes' paraphrase, we shall hopefully be able to understand more clearly where Averroes follows his source text, where he takes up points made in Avicenna's psychological theory, and where and how he distances himself from the latter.

The first half of the passage (1–4) addresses two main themes. One is that “retaining” and “remembering,” though apparently two different functions, are intimately connected, and performed by the same faculty (4).

³⁴ The editions print *ru'ya*, possibly indicating the presence of the original form *rawī'a* in the mss. Cf. Lane 1968: part 3, 1175, 1196.

³⁵ *Comm. Parva Naturalia* 43–44; Averroes 1972c: 38–39. Unless otherwise indicated, translations of Arabic texts are my own.

³⁶ Part of the reason for the general “family resemblance” between Averroes' and Avicenna's accounts of the post-sensory faculties is, of course, that they both draw on *Kitāb al-Ḥiss wa-l-maḥsūs* in one form or another.

This theme is, in different form, already present in Aristotle's *On Memory*,³⁷ but the characterization of recollection as "discontinuous retention, whereas retention is continuous recollection" (Averroes 1961: 41; 1972c: 37) goes back directly to *Kitāb al-Ḥiss wa-l-maḥsūs*.³⁸ The second, for us more important theme is that remembering involves two distinct objects to be remembered: form (*ṣūra*) and *ma'nā*, an idea that can be traced back, via *Kitāb al-Ḥiss wa-l-maḥsūs*, to roots in *On Memory*.³⁹ Therefore two faculties are required to do the storing and remembering ("making present"), i.e. formative faculty and memory. There is also a third faculty involved: it is the task of the faculty of thought to join the correct *ma'nā* and form together.⁴⁰

This latter point is addressed by Averroes in the second part of T4 (5–9). Here, however, the reference to *Kitāb al-Ḥiss wa-l-maḥsūs* is less pronounced than the engagement with Avicenna. Averroes obviously recognizes the point Avicenna is addressing with his introduction of the estimative faculty, i.e. that we need to be able to explain how animals can remember things or make judgments about danger, etc. As we will see in more detail later, *Kitāb al-Ḥiss wa-l-maḥsūs* does not offer much help in this respect. Even though it does mention animals as being able to remember things,⁴¹ it does not address this question explicitly and, if anything, takes a rather critical view on their ability to "judge" dangers and benefits, etc. On the other hand, the adaptation says nothing about the involvement of the intellect in the judgment that accompanies memory in humans, leaving it to the "faculty of thought" (*al-fikr*) – reflected in Averroes' remark on the intellect's being represented by "thought and

³⁷ Cf. e.g. 449b6–7.

³⁸ "This is why recollective memory (*dhikr*) is discontinuous retentive memory (*ḥifẓ munqaṭi*)," MS Rampur Ar. 1752, fol. 10a.

³⁹ It seems to be related to the thought that "memory . . . is not without an image" and that "it is not possible to think without an image"; *On Memory*, 450a12–13; 449b31–450a1 (English at Aristotle 2004: 48–9). However, its development is in fact *not* rooted in the corresponding sections in the adaptation (MS Rampur Ar. 1752, fols 11b–12b). The passage in question, MS Rampur 1752, fols 14a–15a, is, rather, based on a heavily altered rendering of *On Memory* 450b18–451a5. Cf. Hansberger forthcoming (b), sections 3.1 and 3.2. On this point in Averroes, cf. also Black 1996: 167–70.

⁴⁰ "It has also become clear that when a man remembers something he has forgotten, [the faculty of] memory will only remember the *ma'nā*, and together with the *ma'nā* the formative [faculty] will make present to him the image (*ṣanam*) of that *ma'nā*, so that he will remember the *ma'nā* through the form of the thing, mediated by discrimination. For [the faculty of] memory can only remember something it has forgotten by means of that [act of] discrimination which the thinking faculty has carried out on it [earlier]" (MS Rampur Ar. 1752, fol. 16a).

⁴¹ "[B]ecause man can remember only what he has sensually perceived [before], like all animals, because all animals remember only what they have once perceived"; MS Rampur Ar. 1752, fol. 11a, a somewhat botched rendering of *On Memory* 449b25–30.

deliberation" (6); nor does it address the question of whether this faculty (which, after all, is a faculty of the *animal* soul) should be considered as restricted to human beings alone. This gap is one that Averroes needs to fill, especially in light of the prominence Avicenna has given to animals' capacity for judgment with his introduction of the estimative faculty. Nevertheless, Averroes does not want to adopt Avicenna's solution: as we have already seen in the *Incoherence of the Incoherence*, he considers the estimative faculty superfluous to "Aristotle's" already sufficient explanation of the workings of the post-sensory faculties. It is only allowed to stand in for the one thing his source, *Kitāb al-Hiss wa-l-mahsūs*, does not mention: the judging faculty *in animals* – but even then, not quite: in reality, Averroes tells us, what Avicenna calls *wahmiyya* is a "nature" in animals rather than a proper faculty (7), and it "does not have a name" (8).

That Averroes does not intend to concede any more ground to Avicenna is furthermore brought home with the beginning of the next paragraph:

T5 There are, then, *three* actions belonging to *three* faculties, two of them conveying the two simple things from which the composite forms are composed (one of which is the image, the other the *ma'nā* of the image), and the third faculty joining those two things to each other.⁴²

Over the following pages,⁴³ Averroes proceeds to give a detailed account of the three faculties and their functions, their relation to each other, and their localization in the ventricles of the brain. Most of his points are anchored in *Kitāb al-Hiss wa-l-mahsūs*. The correspondence is particularly visible in a passage where Averroes explains how the "form" of the perceptible object "passes" through the faculties, as it were:

T6 There are, therefore, five ranks. The first is corporeal, with many shells (*qushūr*): that is the perceptible form outside the soul. The second rank is the existence of this form within the common sense, which is the first of the spiritual ranks (*al-marātib al-rūḥāniyya*). The third rank is its existence in the imaginative faculty (*al-quwwa al-mutakhayyila*), which is more spiritual than the first one. The fourth rank is its existence within the discriminating faculty (*al-quwwa al-mumayyiza*), and the fifth its existence in the memorative faculty (*al-quwwa al-dhākira*), which is the most spiritual one, for it receives (*qabila*) the core (*lubāb*) of what the three [preceding faculties] have discriminated (*mayyaza*) and cleansed from [its] shell[s].⁴⁴

⁴² *Comm. Parva Naturalia* 44; Averroes 1972c: 39–40 (my emphasis).

⁴³ *Comm. Parva Naturalia* 44–53; Averroes 1972c: 39–48; 1961: 24–29.

⁴⁴ *Comm. Parva Naturalia* 47–48, Averroes 1972c: 42–43.

The parallel passage in *Kitāb al-Hiss wa-l-maḥsūs* runs as follows (it is here quoted with some context):

T7 If this is so, we shall say that the sense [faculty], which is within the range of the composite substances, is most suited to receiving those composite forms; next, the formative [faculty] (*al-muṣawwir*) is more suited to receiving from the sense [faculty] than is [the faculty of] memory (*al-dhikr*), because it is within its range. Then [follows] the thinking faculty (*al-quwwa al-fikriyya*), which is the discriminating (*mumayyiza*) faculty that <distinguishes> the shell (*qishr*) from the core (*lubb*), because nothing comes after the form but discrimination. When the thinking faculty distinguishes the core from the shell, the memorative faculty (*al-quwwa al-dhikriyya*) will then receive the core, which resembles its substance. That core is the *ma'nā* sought after. If someone says: "And why is the memorative [faculty] more suited to receiving the core?" we will answer that there are five ranks. The first of them is corporeal and sensitive (*ḥāssī*), having many shells: this is the perceptible body. The second rank belongs to the sense [faculty] (*al-ḥāss*), which purifies that perceptible, so as to cleanse the greater part of pollution and shells from [that rank]. The third rank [is] the purifying one which, picking up from the sense faculty, will cleanse the [remaining] small amount of pollution and the subtle shell; this is the formative faculty. The fourth rank belongs to the one that discriminates that shell and that core that has been purified by the formative [faculty], so that the pure thing shall be freed from any turbidity, and so that it shall become clear what that purity is and what that turbidity is: this is [the faculty of] thought (*al-fikr*). The fifth rank belongs to the retaining [faculty] (*al-ḥāfiẓ*) which obtains (*muḥaṣṣil*) what the [other] faculties have purified and what the fourth faculty has discriminated.⁴⁵

The correspondence is clear enough and, I believe, goes some way to explain why Averroes insists that Avicenna's *wahmiyya* is superfluous to the system of post-sensory faculties. His "Aristotelian" source text clearly advocates a set of three such faculties (plus the common sense). The formative faculty (which Averroes normally calls "imaginative" [*muta-khayyila*], but in this particular context, obviously under the direct influence of his source, several times refers to as *al-muṣawwir* or *al-quwwa al-muṣawwira*, "formative faculty") retains the form of the perceived object and will bring it to the perceiver's attention again. The next faculty to operate on this form is the cogitative faculty, the "faculty of thought." In Averroes' paraphrase of the passage, it receives the name *al-mumayyiz(a)*,

⁴⁵ MS Rampur Ar. 1752, fols. 15b-16a.

apparently derived from the description of its function in this context.⁴⁶ It extracts the *ma'nā*, the entirely incorporeal (i.e. purely cognitive, even though still particular) core of the perception, to be obtained and stored by the memorative faculty. When the corresponding object is being remembered, it will again fall to the cogitative faculty to join the correct form and *ma'nā* together. As the cogitative faculty is responsible for the "perception" of the *ma'nā*,⁴⁷ no estimative faculty is needed in order to perform this function.

However, this passage in *Comm. Parva Naturalia* (T6) does not say anything about the mental activities that are supposedly performed by animals. To what extent are the functions of these faculties of the animal soul applicable to them? Within Averroes' epistemology, the cogitative faculty is the faculty through which the intellect carries out its operations in the particular human being.⁴⁸ Lacking reason, animals do not engage in cogitation. So what about their judgments concerning the danger or benefit implicit in the things they perceive? As it happens, T4, even if it all but makes explicit that animals have no faculty of cogitation, is nevertheless the most optimistic passage in *Comm. Parva Naturalia* when it comes to the abilities of animals. In a later section of *Comm. Parva Naturalia* II.2, where the role of the common-sense faculty in dreaming is discussed, Averroes is more skeptical:

T8 (1) The help this faculty [i.e. the common sense] offers to the cogitative [faculty] consists in presenting the mark (*rasm*) it contains of that thing, so that the imaginative [faculty] (*al-khayāl*) can cleanse it, and present it to the cogitative faculty. For the *ma'nā* that is perceived (*yudraku*) by [the faculty of] thought (*al-fikr*) is spiritual, and thus it requires the help of those faculties in order to carry out the act of perception that is specific to it. (2) This does not occur in any animal except the human being, because [the other animals] do not possess an intellectual faculty. With respect to sensibles, they only perceive the marks and shells (*qushūr*) of things.

⁴⁶ That this must be the cogitative faculty emerges clearly from the context but is further confirmed by the quoted passage in *Kitāb al-Hiss wa-l-mahsūs* (T7); cf. Gätje 1965: 279. H. Blumberg, in Averroes 1961: 25–27, 29, misleadingly translates *mumayyiza* as "estimative" (as noted already by Black 1993: 249 n. 24; 1996: 164 n. 10), a striking example of Avicenna's theory of the internal senses prejudicing a reading of Averroes' text.

⁴⁷ This is not to prejudge D. L. Black's contention that for Averroes, "true" perception of *ma'ānī* is the preserve of the memorative faculty (see Black 1996). In the present context, the focus lies primarily on the question of whether and how the *ma'nā* can be identified, i.e. separated from the form, which is the function of the cogitative faculty. While I agree that Averroes emphasizes the perceptive aspect of the memorative faculty, he does also call the function of the cogitative faculty "perception" (*idrāk*, cf. T8 below).

⁴⁸ For the cogitative faculty in Averroes and its relation to the intellect, cf. Taylor 1999 and 2000a.

(3) Evidence for this is that they sometimes pass by something that is harmful to them, but do not steer clear of it, or by something beneficial [to them], but do not approach it.⁴⁹

Averroes here seems to say that animals do *not* perceive *ma'ānī* (2) – whatever the judgments performed by the imagination (or the “faculty without name”) mentioned in T4 may amount to. Not just that, he even sheds doubt on the phenomenon that Avicenna’s estimative faculty is supposed to explain, i.e. purposeful animal behavior that seemingly points to their ability to make certain judgments (3). While Averroes does not deny such behavior outright, he cites incidents where animals obviously fail to behave appropriately as evidence for the absence not just of intellect, but more generally of the ability to perceive *ma'ānī* through the faculty of cogitation. Averroes’ text here reflects a passage in *Kitāb al-Hiss wa-l-mahsūs* where an even more critical attitude toward the mental abilities of animals is articulated:

T9 (1) If someone says: “You have claimed that this sense [faculty] [i.e. the common sense] does not belong to the bestial soul, and if it does not belong to the bestial soul it will not exist in the bestial [soul]; but you have also claimed that this [faculty] is the agent that perceives things, rather than those organs that do the seeing. Then, how come that beasts sense and see things?,” (2) we shall say: the bestial soul is able to see the marks (*rusūm*) of things as a body (?) moving from here to there.⁵⁰ Therefore [beasts] see the marks of things, whereas they do not have the ability to perceive (*adraka*) things in their true reality, nor can they discern (*mayyaza*) them so as to know the things in their very nature. (3) Evidence for <that> is the fact that beasts may see things that are motionless and do not constitute any harm to them, but they will avoid them with all their might; and they may see [another] thing that they ought to avoid, but they will seek out its company and will not avoid it. If they saw the forms of the things in their reality, and if they had the faculty for discerning (*tamyīz*) those things, it <would> not <be> like that. (4) But since they have come to have some of the light of the rational soul within them, they perceive, by this light, the marks of things in an obscure way, by means of the organs in which [this light] has come to be.⁵¹

This is, unfortunately, part of one of the more obscure passages of *Kitāb al-Hiss wa-l-mahsūs*. In particular it is confusing that the common sense is supposed not to exist in animals (a claim that has indeed been made a few paragraphs earlier but is certainly not maintained in other parts of the text).

⁴⁹ *Comm. Parva Naturalia* 60, Averroes 1972c: 55.

⁵⁰ The text is possibly corrupt here.

⁵¹ MS Rampur Ar. 1752, fol. 27a–b.

The general trajectory, however, is reasonably clear and furthermore explicable in the context of the adaptation, as it relates to a tension created by the adaptor's notion of "spirituality" that becomes central in the context of veridical dreaming. Establishing a strict dichotomy between corporeality and spirituality, the adaptor firmly links the "spiritual faculties" to veridical dreaming, a "noble," "inner" kind of perception of future events that takes place during sleep and that is contrasted with the "mean" type of external sense perception devoted to the present, belonging to the lowly realm of corporeality and associated with the waking life.⁵² Naturally, veridical dreaming – a type of divination – is not something that would be accessible to animals. To the adaptor, this makes it virtually impossible to explain not just how they could have a share in the activities of these faculties, but even how they could in a full sense partake in sense perception and in sleep.⁵³ This tension is, apparently, taken to a new extreme in T9 (1): even the common sense is here considered beyond the pale for mere animals, probably because, being the first to "cleanse" away corporeal aspects of the perceptible, it too transcends pure corporeality. Without disputing it directly, the text seems to go back on this pronouncement in (2) and (3), where it is only the "discernment of true reality" of perceptible forms, i.e. the function associated with the faculty of thought, that is seen as closed to animals – fundamentally the position championed by Averroes as well. Rather incongruently, however, an animal's ability to perceive anything at all is then, in (4), ascribed to the "light of the rational soul," which, apparently, illuminates its sense organs.⁵⁴ There seems to be no easy way of interpreting this coherently; the best one could say, perhaps, is that the adaptor feels compelled to attribute any positive achievement, down to sense perception, to the higher spiritual and even intellectual realm rather than to the corporeal sense organs alone.

Averroes refrains from taking over the more extravagant and dubious statements expressed in T9 (1) and (4).⁵⁵ His text does, though, echo the skepticism concerning animal judgments found in T9 (2–3). In thus downplaying the actual abilities of animals, he weakens the case for the

⁵² Cf. Hansberger 2010: 153–58.

⁵³ Cf. MS Rampur Ar. 1752, fols. 24b–27a; Hansberger forthcoming (a).

⁵⁴ This could possibly be a distorted reference to *On the Soul* 429a2–4 ("Since sight is the principal sense, the name imagination [*phantasia*] was derived from light [*phaos*], because without light it is not possible to see"; trans. Shields, in Aristotle 2016: 58), which is directly followed by a brief discussion of the benefit of imagination for animals (see note 60 below).

⁵⁵ There might be a case for arguing that (4) could be a later addition that need not necessarily have been contained in Averroes' copy of *Kitāb al-Ḥiss wa-l-maḥsūs*. This does not apply in the same way to (1), however.

claim that, at least according to his own assessment expressed in T1, lies at the root of Avicenna's introduction of the estimative faculty: that animal behavior needs to be explained with recourse to a function that is, in a strong sense, analogous to human reasoning.

Averroes versus Avicenna (Revisited)

Turning back to the text quoted at the beginning of this chapter, it is time to see whether we now can make more sense of Averroes' criticism of Avicenna as he voices it in the *Incoherence of the Incoherence* (T1). For the sake of convenience it will be worth quoting the passage again here:

T1 In all of this, there is nothing but an account and a representation of the philosophers' doctrine of these faculties; only he followed Avicenna in this, who is at variance with the [other] philosophers in that he sets up another faculty than [just] the imaginative (*al-mutakhayyila*) in animals, in the place of the cogitative faculty (*al-fikriyya*) in humans, calling it [the] estimative (*wahmiyya*) [faculty]. He says that the ancients supposedly apply the term "imaginative faculty" to this [i.e. the estimative] faculty, and whenever they do this the imaginative faculty in animals is a stand-in for the cogitative faculty in humans and is located in the middle ventricle of the brain, whereas when the term "imaginative faculty" is applied to that [faculty] which is specifically concerned with the form (*shakl*), it is said to reside at the front of the brain.⁵⁶

This passage makes more sense indeed if we assume Averroes' reference point to be not Avicenna's set of faculties, but that of *Kitāb al-Ḥiss wa-l-maḥsūs*, where the function of perceiving *ma'ānī* (i.e., "discriminating" between form and *ma'nā*) is assigned to the cogitative faculty (*al-fikr, al-fikriyya*). This is the faculty whose function Avicenna seeks to replace with his estimative faculty. Even if Averroes here focuses on the case of animals only, Avicenna's addition of the estimative faculty as such has, of course, implications extending to the human soul and the role of the cogitative faculty within it. By ignoring this point in his reply to al-Ghazālī, Averroes plays down the differences between Avicenna's psychological theory and what he takes to be the general philosophical doctrine, for which he, a few lines down, refers the reader to "*al-Ḥiss wa-l-maḥsūs*."⁵⁷ Thus, Avicenna's estimative faculty is here rejected not as usurping the function of the cogitative faculty as such, but as an addition that is unnecessary because

⁵⁶ *Incoherence of the Incoherence* 546–47, English at Averroes 1954b: I.336 (modified).

⁵⁷ *Incoherence of the Incoherence* 547.

it is supposed to represent the function of the cogitative faculty in animals, where, however, it is not really present at all.

Averroes then further explains that Avicenna (wrongly) assumes that the “ancients” equivocated on the term “imaginative faculty,” using it for two different functions: for the discrimination of *ma‘ānī* and for the function having to do with “forms” specifically.⁵⁸ For Avicenna, this latter function would have been retentive imagination, but Averroes appears to choose a deliberately vague expression: for him, the imaginative faculty is not (just) about the retention of forms, and this is, in fact, exactly his point in criticizing Avicenna’s move of introducing the estimative faculty. Avicenna’s argument that the two functions are associated with two different locations, which would imply that the faculties fulfilling these functions must also be different, is not discussed any further by Averroes. Since he will claim that the ancients considered “judgments” in animals as part and parcel of the normal function of the imaginative faculty, he may expect that this will do away not only with the accusation of equivocation but also with the supposition that there is a second location involved.

The crucial question is now whether, in his brief sketch of the “real” doctrine of the ancients, which is supposed to support his criticism, we can detect any influence of *Kitāb al-Ḥiss wa-l-maḥsūs*. Again, I quote the relevant passage for a second time:

T2 (1) What is apparent from the doctrine of the ancients is that the imaginative faculty (*al-mutakhayyila*) in animals is what determines that for the sheep, the wolf is [to be taken as] an enemy while the lamb is [to be taken as] a friend; (2) for the imaginative faculty is a perceptive (*darrāka*) faculty and thus necessarily possesses judgment, without there being any need to introduce another faculty. What Avicenna says would only be possible if the imaginative faculty were not perceptive; hence there is no sense in adding another faculty to the imaginative in animals.⁵⁹

As we have seen in the previous section, *Kitāb al-Ḥiss wa-l-maḥsūs* is not exactly forthcoming where the functioning of the soul’s faculties within animals is concerned, and at least as far as the extant text goes it is hard to see where Averroes would have found a clear and affirmative statement on which to base his first claim (1) – especially given the rather skeptical outlook on animal performance we have encountered in T9. Averroes will,

⁵⁸ Perhaps Averroes is here referring to a remark in Avicenna’s *Qānūn*: “Some people, speaking metaphorically, call this [i.e. the estimative] faculty ‘imagination’ (*takhayyul*); this is open to them as there is no quibbling over names” (Avicenna 1877: 1.72).

⁵⁹ *Incoherence of the Incoherence* 547, English at Averroes 1954b: 1.336 (modified).

however, have found positive support for his thesis in *On the Soul* III. 3 (429a2–9), where Aristotle speaks briefly about the role of imagination in animal behavior.⁶⁰ In both *Paraph. On the Soul* and *LC On the Soul* Averroes expands on this as indicating the usefulness of the imaginative faculty in animals: it enables animals to avoid harm and to seek benefit, even in the absence of actual sense-perceptions that would provide immediate guidance. In this way, imagination in animals makes up for their lack of intellect.⁶¹

As the reason for the imaginative faculty's ability to produce judgments, Averroes cites its perceptive power (2).⁶² This is in clear distinction to Avicenna, who explicitly determines the equivalent faculty of imagination – *al-khayāl / al-muṣawwira* – as a faculty that merely retains but does not perceive.⁶³ The emphasis on this perceptive power is, however, absent from the passages in *Paraph. On the Soul* and *LC On the Soul*. And in any case, at the end of the paragraph in the *Incoherence of the Incoherence*, it is *Kitāb al-Ḥiss wa-l-maḥsūs* that is cited as a reference: "The question of these forms [i.e. the ones perceived by the imaginative faculty] is concisely treated in *al-Ḥiss wa-l-maḥsūs*."⁶⁴ What, if anything, in *Kitāb al-Ḥiss wa-l-maḥsūs* could be behind Averroes' insistence on the perceptive function of the imaginative faculty?

For one thing, *Kitāb al-Ḥiss wa-l-maḥsūs* does establish the notion of an "internal perception" that is characteristic of the three "spiritual faculties," as opposed to the external perception of the five senses.⁶⁵ This is taken up by Averroes: he speaks of "perception from inside" (*idrāk alladhī yakūnu min dākhil*)⁶⁶ and "internal (sense-) perception" (*al-ḥiss al-bāṭin*).⁶⁷ This notion of "internal perception," however, is associated with veridical dreaming, and as such is not applied to animals (as we have seen in the

⁶⁰ "Because instances of imagination persist and are similar to perceptions, animals do many things in accordance with them, some because they lack reason, e.g. beasts, and others because their reason is sometimes shrouded by passion, or sickness, or sleep, e.g. humans" (429a4–8, trans. Shields, in Aristotle 2016: 58).

⁶¹ *Paraph. On the Soul* 107–8; *LC On the Soul* 377–78, English at Averroes 2009: 291.

⁶² Again, this is the "imaginative faculty" according to Averroes' system as based on *Kitāb al-Ḥiss wa-l-maḥsūs* (i.e. the formative faculty), not Avicenna's *mutakhayyila*, i.e. the animal equivalent to the cogitative faculty.

⁶³ "The imaginative and formative faculty (*al-khayāl wa-l-muṣawwira*) ... retains what the common sense has received from the five particular senses ... It should be noted that receptivity and retention are functions of different faculties" (Avicenna 1985: 201, trans. Avicenna 1952: 31, modified). Cf. Black 1996: 162, 164.

⁶⁴ *Incoherence of the Incoherence* 547, trans. Averroes 1954b: 336 (modified).

⁶⁵ Cf. Hansberger 2010: 154–57.

⁶⁶ *Comm. Parva Naturalia* 87; Averroes 1972c: 82.

⁶⁷ *Comm. Parva Naturalia* 88; Averroes 1972c: 83.

last section). Nevertheless, it could, for Averroes, have underscored the idea that the faculties of imagination, cogitation, and memory are principally perceptive faculties.

However, there is another sense in which *Kitāb al-Hiss wa-l-maḥsūs* characterizes the activity of the imaginative (formative) faculty as perceptive, and in a relevant way. In the process described in T7, the perception of a *ma' nā* may only be achieved when it is discriminated by the faculty of thought and received, freed from all remnants of corporeality, in the faculty of memory. But nevertheless the *ma' nā* is already present in the imaginative (and even the perceptual) form⁶⁸ – as its “core,” which at this level cannot yet be discerned due to the presence of the corporeal “shells.” Moreover, the imaginative faculty does contribute to its eventual perception. For it does not just store a form exactly as it has been handed to it by the common sense. In receiving a form, it “cleanses” it before passing it on to the faculty of thought, thus getting one step closer to a proper perception of the *ma' nā* (the point in which the activities of all the spiritual faculties culminate). In comparison to the form presented to it by the common-sense faculty, its own form is more “spiritual,” fundamentally in the same way in which the form perceived by the common sense is more spiritual than the actual corporeal object of perception. This increase in spirituality is part of what it means to be “perceptive”; thus it also characterizes the five-stage process described in T6/T7. For Averroes, in animals the stage associated with imagination comes as close to perceiving a *ma' nā* as is conceivable for a creature that does not possess intellect. This may imply some sort of dim awareness of the *ma' nā*, i.e. of what the thing in question is, without being able to discern it clearly. More, Averroes apparently thinks, is not required; and he hence criticizes Avicenna for having disregarded the perceptive aspect of the imaginative faculty, which renders the introduction of the estimative faculty superfluous and pointless. While in humans, *ma' ānī* are perceived by the cogitative (and memorative) faculty, in animals this function *as far as it goes* (and this is *not* as far as to be a proper equivalent to human cogitation) is performed by the imagination. Averroes’ swipe at Avicenna has a certain sting to it as Avicenna himself, even apart from any use of the term “internal senses,” describes the post-sensory faculties, including the imaginative or formative faculty, as “perceptive”: as *quwā mudrika min bāṭin*, “faculties that perceive from inside.”⁶⁹

⁶⁸ A point also emphasized in Black 1996: 181.

⁶⁹ Cf. Avicenna 1985: 200.

When it comes to understanding Averroes' theory of the internal senses and the systematic place he assigns to them within his psychology and epistemology, it goes without saying that the mere reference to a source text will never provide satisfactory answers. Averroes' thought ultimately needs to be assessed on its own terms – and in any case we have already seen that his attitude to his source is more complex and sophisticated than may be suggested by the mere fact that he defends its version of the internal sense theory. Nevertheless, I hope that this brief investigation will have shown that the text of the Arabic adaptation of the *Parva Naturalia* is apt to change our general perspective on Averroes' *Comm. Parva Naturalia* and its theory of internal faculties. It sheds new light on Averroes' promotion of such a theory in the first place, as well as on his criticism of Avicenna's version of that theory. Averroes does not propose a derivative theory of his own as an alternative to an Avicennian "original"; on the contrary, he would have considered himself as representing Aristotle's view on the subject, while Avicenna was the one who had tampered with the "Aristotelian" source. That this source should have been an adaptation that grossly deviated from the Aristotelian original lends the story a somewhat tragic note. It also raises questions as to Averroes' own assessment of *Kitāb al-Ḥiss wa-l-maḥsūs* and its authenticity, especially given his intimate acquaintance with both Aristotle's philosophy and Galen's medical works. On the other hand, it also goes some lengths to explain, or provide some background to, some of the particular problems and "costs" associated with Averroes' internal sense theory. This pertains to the way we have seen him wrestling with the interpretation of animal behavior and to his related and not entirely unproblematic move of restricting some of the "animal" faculties to the human species. Another, perhaps more striking example would be the question of why Averroes, who after all regarded matter as the individuating principle, would have been prepared to entertain the notion of a *ma'nā* as something particular and individual but nevertheless entirely immaterial.⁷⁰ It thus promises to be worthwhile to reassess Averroes' theory of the "internal senses" more thoroughly in the light of *Kitāb al-Ḥiss wa-l-maḥsūs*.

⁷⁰ This problem is stressed, e.g., in Black 1996: 186–87.

CHAPTER 9

Averroes on Medicine

Joël Chandelier

Like many philosophers of the Islamic world before him, and notably like Avicenna, Averroes was also a physician. Yet this part of his intellectual activity has interested few, although his medical works met with great success, especially in the West.¹ Apart from some slight interest in the history of Andalusian medicine, this lack of attention can probably be explained by a certain reticence to see in Averroes something other than an eminent philosopher. It is also clear that Averroes' own remarks hardly contributed in awakening scholarly interest: does he not classify medicine among the purely practical arts, such as navigation? Does he not on occasion mock Galen, and physicians on the whole? In short, his interest in the discipline was isolated at best, and purely utilitarian at worst.

However, if Averroes wrote on the topic of medicine, it was not simply to conform to some tradition, nor was it for the pleasure of contradiction. His body of work in the field is abundant: commentaries, independent writing, summaries. The question remains of his goal in paraphrasing Galen, or in writing a general treatise on the art of medicine. Researchers have largely ignored this question, especially if we compare it with the extensive research that has been conducted on his philosophical work. It is therefore appropriate, in this chapter, to start by posing some simple questions. What was Averroes' concrete body of medical work? Was he himself a physician, and what was his attitude toward the Galenic tradition? We will thus be able to question the relationship, established by the Cordovan himself, between his philosophy and his medicine, and understand his real objective and the discipline's place in his system of knowledge. Finally, we will see some examples of Averroes' attempts to frame, even improve on, the medical theory of his time.

¹ There is no general overview of Averroes' medicine. See, however, Torre 1974 and Cruz Hernández 1997. On the *General Principles of Medicine*, see Gätje 1980 and 1986; Tamani 1994. On the reception of Averroes in the Latin West, see Jacquart and Micheau 1990: 182–89.

The Medical Work of Averroes

In the biographical note that he devotes to Averroes, the Damascene physician Ibn Abī Uṣaybiʿa (d. 1270) lists fifteen medical texts ascribed to the philosopher out of a total of forty-seven.² Another anonymous list that is found in a manuscript from the library of the Escorial includes seventy-six treatises, twelve of which are medical – and among which two are not mentioned by Ibn Abī Uṣaybiʿa.³ To these works – some of which seem to have been lost – one must add a certain number of recovered works from different manuscripts, such as the treatise *On Poisons*, preserved only in Latin, or the little works *On the Moment of Crisis* or *On the Preservation of Health*. In total, Averroes appears therefore to have written a little more than twenty medical treatises.⁴ Of course, not all are of equal value or size. For the most part, with the exception of Averroes' *General Principles of Medicine* (*Kitāb al-Kulliyāt fī l-ṭibb*, or *Colliget* in its Latin appellation), these works are short. They can be roughly organized into three groups. The first is comprised of general works dealing with medicine as a whole: this includes the *General Principles* and Averroes' commentary on Avicenna's *Medical Poem* (*Urjūza fī l-ṭibb*, henceforth *Comm. Medical Poem*). The second group consists of a series of paraphrases devoted to various treatises by Galen: *On Elements* (*Talkhīṣ Kitāb al-Uṣṭuquṣṣāt*), *On Temperaments* (*Talkhīṣ Kitāb al-Mizāj*), *On Natural Faculties* (*Talkhīṣ Kitāb al-Quwā al-ṭabīʿiyya*), *On the Difference of Fevers* (*Talkhīṣ Kitāb al-Ḥummayāt*), *On Differences and Causes of Symptoms and Diseases* (*Talkhīṣ Kitāb al-ʿIlal wa-l-aʿrāḍ*), and *On Simple Medicines* (*Talkhīṣ min Kitāb al-Adwiya al-mufrada*).⁵ These commentaries are for the most part written in the *talkhīṣ* style, a relatively open paraphrasing of the text that does not always follow the content closely. Last, the third group of Averroes' medical works corresponds to a rather diverse collection of around ten original works, mostly short: among the best known and most widely disseminated, we may cite a treatise on theriac and the one on poisons.

The most famous of Averroes' medical works is the *General Principles of Medicine*. It was most likely written between 1162 and 1169. Averroes

² Ibn Abī Uṣaybiʿa 1882: II.75–78.

³ The list is preserved in MS ar. 884 of the Escorial Library (fols.83r–84v). It is edited and analyzed in Cruz Hernández 1997: 359–69.

⁴ A provisional list is given by Cruz Hernández 1997.

⁵ Most of these texts are edited in Averroes 1984a and translated in Averroes 1987. Other texts are mentioned by biographers or in lists of Averroes' works.

himself explains the purpose of the treatise: "The goal of [my] discourse is to propose, for the art of medicine, a summa, sufficient by its concision and brevity, that will be an introduction for those who wish to study the parts of the art, and also a reminder for those who reflect on the art."⁶ The work is limited to the "generalities" of medicine: anatomy, physiology, general pathology, semiology, pharmacology, regimen, and general therapeutics, according to the chosen order of the seven books. Averroes explains his choice at the end of the book, referring those with an interest in particular diseases to the *Taysīr*, a treatise written by one of his contemporaries, Ibn Zuhr (d. 1162):

There is no doubt that the art of medicine must take into account as much as possible particular issues, which we will address when we can, for at the moment we are occupied with more important things. Thus, those who find that this book is lacking in this must consult [other] medical treatises. Among these, the best is a book called *al-Taysīr*, composed in our time by Abū Marwān ibn Zuhr: I have asked him for this book and have copied it for myself.⁷

Averroes evidently never found the time necessary to integrate such specifics into his *General Principles*: the detail of specific issues is only occasionally addressed in some isolated works. He did find, however, the time for a general revision of the *General Principles*: he indicates having done this at the request of the ruler of the city and prompted by philosophers. Averroes mentions in this revision his own summary of Galen's "Book of Fevers" (that is, *On the Difference of Fevers*). As this work is dated 1193 in its unique manuscript, it is likely that Averroes revised the *General Principles* in the last years of his life.⁸ Be that as it may, only the first version is available in Arabic; the second, which included a number of additions, apparently exists only in Latin and was translated in 1285 by a Jew from Padua named Bonacosa. The survival of both versions, though in different languages, allows us to appreciate the evolution of Averroes' doctrine from his early to his later days. We will discuss some examples later.⁹

⁶ *General Principles of Medicine* 1 (Prologue). ⁷ Ibid., 518 (Conclusion).

⁸ The date of the paraphrase of the *De febris* is given in MS Escorial 884, fol. 8r: the Wednesday after *muḥarram* 589, that is, February 10, 1193. Averroes cites too, in the *General Principles*, his commentary on Aristotle: see *General Principles of Medicine*, at Averroes 1962: X.22v (Bk. 2).

⁹ For the first, Arabic version, I use the edition made by Forneas Besteiro and Álvarez de Morales, listed in the Bibliography as *General Principles of Medicine*. For the Latin version, I use the photomechanical reproduction (Averroes 1962) of the Giunta edition published in Venice in

The same interest in general questions displayed by the *General Principles* is found in the *Comm. Medical Poem* and in the commentaries on Galen. The commentary on the *Poem* is probably, judging from the number of preserved manuscripts (more than thirty),¹⁰ Averroes' most successful medical text. Its objective was above all didactic, which explains why he chose the *tafsīr* form to explain some difficult aspects of Avicenna's text. Whereas the poem covers the whole of medicine, Averroes' commentary touches significantly on theoretical and general questions: while such issues as the definition of medicine and the theory of complexion or pharmacology are particularly well developed, others are more cursorily examined.

The commentaries on Galen seem to be preserved in only one manuscript; they were most likely written toward the end of Averroes' life, since two of them are dated 1192 and 1193.¹¹ The choice of Galenic works commented on by Averroes is quite interesting. A significant amount of them are physiological: such is the case for *On Elements*, *On Temperaments*, and *On Natural Faculties*. These three books, along with a fourth composition (*On Minor Anatomy*) comprising five little galenic treatises on anatomy, constituted the second level of the "Alexandrian canon," that is, the selection of sixteen Galenic books established at the end of antiquity with the aim of organizing medical teaching. Likewise, the merging of the four treatises *On the Differences of Diseases*, *On the Causes of Diseases*, *On the Differences of Symptoms*, and *On the Causes of Symptoms* into the single work that Averroes decides to paraphrase (*On Differences and Causes of Symptoms and Diseases*) was done in the Alexandrian time, where it corresponded to the third level of teaching.¹² If we add to this the fact that the treatise *On the Difference of Fevers*, also theoretical in approach, was likewise part of the Alexandrian canon, we deduce that Averroes' choices fall within the tradition of Arabic Galenism, itself inherited from the Alexandrian Galenism of late antiquity. Averroes clearly chose to comment on the foundational works of Galen that were in wide currency and had already been the subject of summaries and commentaries.

1574. When the text is identical in both versions, I translate it from Arabic. I am currently working on a critical edition of the second version of the *General Principles*. There also are two Hebrew versions, only slightly different from the Arabic one, and preserved in a dozen manuscripts. Regarding these versions, see Gätje 1980: 283–91. Other medical texts of Averroes were also translated into Hebrew; see Steinschneider 1893: 671–77.

¹⁰ See the list in Cruz Hernández 1997: 438–49.

¹¹ The year 1192 for the commentary on the *On temperaments*, and 1193 for the commentary on *On fevers*. See MSS Escorial 881 (fol. 69r) and 884 (fol. 81r).

¹² Iskandar 1976: 245–46.

There remains one last Galenic work on which Averroes commented: *On Simple Medicines*. According to Ibn Abī Uṣaybi‘a, Averroes only paraphrased the beginning of this piece, and the list of MS Escorial 884 specifies that it included the first five treatises. It must therefore have concerned the theoretical parts of the work, illustrating Averroes’ interest in pharmacological theory, an interest confirmed by important developments on the same topic in the *General Principles* and in the *Comm. Medical Poem*, in addition to many of his independent treatises. The last of these includes not only a treatise on theriac and another on poisons but also a (lost) debate between Averroes and Ibn Ṭufayl about the medicines of the *General Principles* mentioned by Ibn Abī Uṣaybi‘a. The few remaining isolated treatises concern matters of detail; those that are preserved are very short.

This overview of Averroes’ medical work already gives an idea of the nature of his interest in medicine: he is primarily oriented toward theoretical questions with an evident pedagogical interest, though he also, as we shall see, writes in a polemical tone. Purely practical aspects are left aside: Averroes never wrote any “*practica*,” and it is doubtful that he ever had the intention of producing one as he claims in the first version of the *General Principles*.¹³ The observation raises the question of what kind of physician Averroes was. We know very little about his actual practice. Ibn Abī Uṣaybi‘a affirms that he had as a master Abū Ja‘far ibn Hārūn al-Tarjālī, a physician at the service of Almohad rulers of Seville from 1149;¹⁴ another of his teachers was, according to Ibn al-Abbār, Abū Marwān ibn Jurīyūl.¹⁵ Averroes was also in contact with his contemporaries, notably Ibn Zuhr, whom he held in high esteem: when citing in a chapter of the book on pharmacology the properties of certain stones, he affirms that Ibn Zuhr was “the greatest in medical science since Galen until our time.”¹⁶ We have seen that Averroes also knew Ibn Ṭufayl, and he mentions various other practitioners across his work. Finally, according again to Ibn Abī Uṣaybi‘a, one of Averroes’ sons, Abū Muḥammad ‘Abd Allāh ibn Rushd,

¹³ In the revision of the *General Principles* made at the end of his life Averroes’ deletes this reference to a future treatise on practical medicine and only makes a simple mention of Ibn Zuhr’s *Taysīr*: “those who wish to obtain a science of such clarity should carefully read Abumezon Avenzoar’s books, for in them one clearly finds the treasure of medicine” (*General Principles of Medicine*, at Averroes 1962: X.172v [Bk. 7]).

¹⁴ Ibn Abī Uṣaybi‘a 1882: II.76.

¹⁵ Ibn al-Abbār 1887: I.269.

¹⁶ *General Principles of Medicine*, at Averroes 1962: X.100r (Bk. 5). Note that this mention is not in the first (Arabic) version of the text – which means that Averroes added it when he revised the treatise at the end of his life.

was also a physician, and some of his works are preserved;¹⁷ he is mentioned as a physician, along with his brother Abū l-Qāsim, in the colophon of the commentary on Galen's *On Temperaments*, written in 1192. Moreover, Averroes points out that it was he who incited him to engage with the Galenic text.¹⁸

Notwithstanding that Ibn Abī Uṣaybi'a grants him some disciples in the area of medicine, it seems that Averroes' medical practice was rather limited. Moreover, he repeatedly acknowledges in the *General Principles* that he did not have extensive practical experience. Thus, wanting to shorten the discourse on respiratory accidents, he states: "you will find specific questions in the books of compilers, that is to say of practitioners, and I am not one of them."¹⁹ Later, regarding the treatment of ephemeral fevers, he makes a very interesting confession, saying that he "has not practiced much apart from on [him]self, [his] relatives or [his] friends";²⁰ and he states that he is simply able to monitor the practice of physicians of his time, whom he considers to be often incorrect, "with the sole exception of the Banū Zuhīr family and, in particular, Abū l-'Alā' and his son Abū Marwān."

Averroes' works are, moreover, quite weak on the side of personal experiences in treatment. In the *General Principles*, one can find only one mention of a single detailed, concrete case to support a demonstration. The author describes a tall patient whom he treated for persistent diarrhea, after the failure of several other physicians before him, noting the coldness of one of his arms.²¹ Yet this remains an exception: Averroes ordinarily settles for general practical remarks, and when he cites a precise case, he most often takes it from an ancient authority.²² The reason is simple: what interests Averroes, in the *General Principles* and in the whole of his medical work, is not really concrete medical practice but the framework of medical doctrine itself as situated in his global reorganization of science. For this reason he does not hesitate at the very beginning of the *General Principles*

¹⁷ Ibn Abī Uṣaybi'a 1882: II.77–78. ¹⁸ *Paraph. On Temperaments*, at Averroes 1984a: 69r.

¹⁹ *General Principles of Medicine*, at Averroes 1962: X.55v (not present in the Arabic version). The term used in Latin for "compilers" is rather unusual: "*spicatores*," which means gleaners.

²⁰ *General Principles of Medicine* 445 (Bk. 7). In the Latin version, the passage is a bit different: "As for me, I have not studied this science enough to think I am sufficient" (*General Principles of Medicine*, at Averroes 1962: X.149b [Bk. 7]: *et egomet non studui in hac scientia, ut videatur mihi, ut sim sufficiens*).

²¹ *General Principles of Medicine*, at Averroes 1962: X.81r (Bk. 4), not present in the Arabic version.

²² For example, about leprosy, Averroes cites "Zachara" (maybe Zakariyyā', that is, al-Rāzī?) and only adds: "that is what the marvelous Zachara says, and I have seen it too" (only in the Latin version: *General Principles of Medicine*, at Averroes 1962: X.36v [Bk. 3]).

to warn his readers: "We are looking [here] for statements that conform to the truth, even if it contradicts the judgments of the men of this art."²³ Averroes thus addresses himself to physicians but, as he himself states with a touch of contempt, "[the *General Principles of Medicine*] is not meant for him who has just begun to learn how to read."²⁴ His goal is not to propose new practical cases or improve the accepted doctrine on matters of detail but to organize medical thought as a whole.

Averroes and the Medical Tradition

If Averroes undoubtedly practiced very little, he did, conversely, read a lot; and yet references to his predecessors in the medical field are few. Among the physicians of the Islamic world, the author that he holds in highest regard is, as we have seen, Ibn Zuhr, whom he cites regularly in the *General Principles*. Two other authors are frequently mentioned: al-Rāzī (854–925) and Avicenna (980–1037). Unsurprisingly, the former is generally mentioned in connection with precise aspects of therapy, anecdotes, or *experimenta*, with Averroes notably recalling his experience in hospitals on several occasions.²⁵ References to al-Rāzī are concentrated in the part of the *General Principles* that is dedicated to treatment (books V–VII). There is nothing surprising in this in view of al-Rāzī's reputation as a practitioner; and Averroes acknowledges his competence, asserting that one must "give him the crown in this science, he who lived 135 years, and who started to operate in his fortieth year in this art, died in good health, and saw everything that one can see and know in this science: thus, his books and accounts must be believed."²⁶ From the Cordovan's point of view, al-Rāzī and Ibn Zuhr are in a way the perfect physicians: practitioners interested above all in *particularia*, who did not mix medicine with philosophical considerations. His attitude regarding Avicenna is more nuanced. We know that Ibn Zuhr hardly appreciated Avicenna's medical encyclopedia, the *Canon of Medicine*, but Averroes remains, on the whole, relatively moderate on the issue.²⁷ Though he occasionally criticizes certain

²³ *General Principles of Medicine* I (Prologue).

²⁴ Ibid., at Averroes 1962: X.151 (Bk. 2), not present in the Arabic version.

²⁵ Cf. ibid., 250 (Bk. 4) and 426 (Bk. 7).

²⁶ Ibid., at Averroes 1962: X.771 (Bk. 4), not present in the Arabic version.

²⁷ According to Ibn Jumay' al-Isrā'īlī, author of a commentary on the text (2nd part of the twelfth century), a merchant coming from Iraq gave Ibn Zuhr a nice copy of the *Canon*, a text the Andalusian physician did not know. But after studying it, he judged it to be unsound and refused to add it in its library, using the margins to write prescriptions to his patients. Cf. Savage-Smith 1997: 179.

points of detail, we shall see that he does not hesitate to draw on Avicenna's doctrines in fields such as pharmacology. Above all, he explains his choice to comment on the *Medical Poem* by its qualities of simplicity and clarity; he furthermore holds that this text is "by far the best introduction to medical science."²⁸

References to other Arabic physicians are more rare. In the *General Principles* Ibn Wāfid (998–1074) is mentioned for his collection of pharmacopeia; in the *Comm. Medical Poem* Averroes also cites Ḥunayn ibn Ishāq (c. 808–877) and 'Alī ibn Ridwān (968–1061), notably for their definition of medicine, or Abū l-Qāsim al-Zahrāwī (936–1013). We may note that several of these classic sources are connected to al-Andalus and even to Averroes himself: al-Zahrāwī was one of the first great physicians of the Iberian Peninsula, and Ibn Wāfid was, so it seems, professor to Abū Marwān ibn Jurīyūl, Averroes' master. Averroes is therefore situated within the tradition of Andalusian medicine, a tradition that was probably less theoretical than that which was developed in the East, which partially explains the fact that Averroes used few Arabic medical authorities.²⁹ In any case, they are largely outnumbered by ancient Greek sources. Hippocrates, for example, is cited twenty-seven times in the first version of the *General Principles*, as opposed to eleven times for al-Rāzī and nine times for Ibn Zuhr. Averroes also often mentions (unsurprisingly) Aristotle for his works on natural philosophy. Nevertheless, the most cited author is by far Galen. Without even taking into account Averroes' commentaries on the works of the master of Pergamon, it suffices to say that the latter is explicitly mentioned more than a hundred times in the first version of the *General Principles* and that he is the only authority, with Aristotle, for whom Averroes regularly indicates the exact work to which he refers.

It should be said that Galen is in fact Averroes' real interlocutor in all of his medical work. Averroes' attitude toward him is ambivalent. He recognizes him as the greatest physician, a "man of confidence and experience in this art, to whom nobody can compare."³⁰ But this remark comes at a precise moment, when Averroes wishes to list the properties of medicines, an eminently practical part of medicine. His judgment is clearly less enthusiastic when he speaks of the Greek physician's theoretical assertions. There are numerous criticisms of Galen in the *General Principles*, and they almost always appear when he, explicitly or implicitly, opposes

²⁸ *Comm. Medical Poem* 44 (Prologue). ²⁹ Cf. Langermann 2003.

³⁰ *General Principles of Medicine* 319 (Bk. 5).

Aristotle – which is to oppose, according to Averroes, natural philosophy. There are multiple examples of this: Averroes criticizes Galen on the origin of nerves, on whether there exists female sperm, and on the origin of sensation. Each time, he re-establishes an Aristotelian position, which at times leads him to rash arguments.

A well-known case of this trend is that of female sperm.³¹ For Aristotle, the woman only provides matter for the embryo, by way of menstruation, while the man gives it form via his sperm. Galen, on the contrary, asserts that the man, like the woman, provides matter and form, and postulates, therefore, thanks to the discovery of ovaries (unknown to Aristotle), the existence of female sperm. Yet Averroes categorically refuses any role for this sort for ovaries: according to him, they are not necessary for generation, like nipples on men.³² Averroes also leans toward a classic argument, affirming that women cannot produce this sperm without pleasure: the fact that they can become pregnant without experiencing any pleasure shows that the viscosity produced during coitus has another role than that of sperm. Averroes states:

After I read Aristotle's books, I questioned numerous women on this subject, and several responded that they had become pregnant without the emission of sperm, and even if they found displeasure in coitus.³³

In the first version of the *General Principles*, the text stops here, but in the second, Averroes adds:

I have also seen several times some of them become pregnant although they were raped by men; and one of my neighbours, whose oath is entirely credible, swore on her soul that she had become pregnant immediately while she was bathing in a basin of hot water in which bad men had ejaculated while they were bathing in it.³⁴

This assertion amused physicians later on, who did not fail to mock Averroes.³⁵ But from his point of view, all of these testimonies justify the defense of Aristotle's position, which he regards as logically unavoidable because, as he asserts, if women produced sperm and menstruation, form and matter of the embryo, then men would not be necessary in reproduction. According to Averroes, the existence of female sperm is not logically necessary, and the presence of ovaries should not be explained as existing

³¹ On this topic, see Baffioni 2004. ³² Cf. Cerami 2016b.

³³ *General Principles of Medicine* 71 (Bk. 2). ³⁴ *Ibid.*, at Averroes 1962: X.22v (Bk. 2).

³⁵ Such as Jacques Despars, a French physician of the fifteenth century (cited by Jacquart 1998: 222).

for a primary end, but for the best: they allow the existence of female pleasure, which itself renders coitus desirable and therefore encourages the preservation of the species.³⁶

For Averroes, therefore, Galen represents the best, but also the worst, that medicine can produce: the best from the perspective of observation and knowledge of specific cases, the worst when he aims to discern primary causes and contradicts the teachings of natural philosophy. This explains why Averroes wanted to comment on Galen's works. His first objective is explicitly affirmed at the end of his commentary on the *On Temperaments*: "To make all this man's [Galen's] books accessible to all those who wish to study this art, since it is only through the works of this man that one can learn artisanal method, but their length may provoke laziness in many students."³⁷ But a second, implicit goal is clearly visible from an examination of the concrete content of his critiques: to rectify, for physicians, the philosophical knowledge necessary for their art and to delimit more clearly their field.

Medicine and Philosophy

Averroes' insistence on the limits of medical science is reflected in his definition of medicine at the beginning of the *General Principles*. It is presented as follows: "we say that the art of medicine is an operational art (*ṣinā'a fā'ila*) taken from true principles, by which we seek the preservation of the health of the human body and the removal of disease, according to what is possible in each body."³⁸ The described aim of medicine is, frankly, modest. For Averroes, its goal is not exactly to heal in every case, but to do "what is necessary according to the appropriate measure and moment, then to wait for the result to occur, as in the case of navigation or military technique."³⁹ Averroes explicitly specifies that the "true principles" on which medicine must be based are those of natural philosophy. The two fields of knowledge are therefore placed in a clear and restrictive hierarchical relationship, since the physician must deduce from the philosopher's stated principles the practical applications that he uses. As opposed to Avicenna, who in his *Canon* affirmed the autonomy of

³⁶ Cerami 2016b. ³⁷ *General Principles of Medicine* 94 (Conclusion). ³⁸ *Ibid.*, I (Prologue).

³⁹ *Ibid.*, We find the same notion in his *Paraph. Rhetoric* II.11 (§1.1.24), where, regarding the art of rhetoric, Averroes asserts that "[its] situation is that of numerous arts, such as the art of medicine, for its act is not inevitably to heal, but consists of [the art of medicine] reaching, relative to this, the highest degree of what is possible to do in the thing one looks to heal."

medicine as a discipline,⁴⁰ Averroes seems to regard it as a simple practical art, framed by the theories of natural philosophy. This explains why Averroes so often attacks Galen: as a faithful Aristotelian, he insists on the necessary coherence between philosophical theories and their medical counterparts. A similar position is adopted in the commentary on *De caelo* with regard to the theories of Ptolemy, which Averroes rejects for their nonconformity to the principles of Aristotelian physics.

Yet his opinion is more subtle than it might seem at first glance. First, Averroes does not show the absolute dogmatism of which he has often been accused. The position he defends in his *Comm. Medical Poem*, for example, differs slightly from the one he presents in the beginning of the *General Principles*. Avicenna declared: "Medicine preserves health and treats disease, for a cause that occurs in the body / Its first division is between theory and practice." In his commentary Averroes insists on action as a central element of medicine: to know health and illness scientifically is a function of natural philosophy; it concerns medicine only from the perspective of causes and symptoms. The two disciplines thus have the same object, the human body and its states. Yet their bases and methods are different because, in order to reach its principles, natural philosophy proceeds by scientific induction, whereas medicine functions by experience from specific cases.⁴¹ Subordination is therefore real, since physicians cannot hope to reach authentically scientific knowledge, but the medical discipline maintains its own place. Here we may detect the influence of al-Fārābī, who also inveighed against the philosophical pretensions of physicians and situated medicine among the practical arts, alongside agriculture and cooking. According to him only the study of symptoms, medication, hygiene, and therapy are truly medical; the rest (notably physiology) belongs to natural philosophy.⁴²

To understand the way Averroes conceives of medicine and the relationship between theory and practice, it is useful to examine what he says in his nonmedical works. An essential passage is the introduction to his commentary on Plato's *Republic*. In this text, Averroes explains how practical sciences – among which he counts political science – differ from theoretical sciences. First, they depend on our will and not on a superior principle (nature for physics, God for metaphysics). Second, their goal is only action and not theoretical knowledge, which means that the more

⁴⁰ On Avicenna and the epistemology of medicine, see Gutas 2003.

⁴¹ *Comm. Medical Poem* 46–48. Cf. Cerami 2015b: 50–51.

⁴² On Fārābī and medicine, see Stroumsa 1993.

general their laws, the farther from action they are.⁴³ Averroes clarifies his point of view on politics through a comparison: “[It is] just as in the art of medicine. Hence it is that the physicians call the first part of the art of medicine scientific, and the second practical.”⁴⁴ The division between theory and practice is not just a convention: it results from the very nature of the medical science. Averroes is even more explicit in his commentary on the *Posterior Analytics*. Regarding the passage in which Aristotle explains the so-called subordinate sciences (such as optics with respect to geometry, or mechanics with respect to stereometry), he states, taking the example of medicine: “Generally speaking, it is the case for arts that are divided into practice and theory. And it seems that it is for this reason that [Aristotle] affirms that ‘these sciences are almost synonymous,’ for we generally consider them to be a single science, like experimental medical art with respect to rational medical art, whereas in reality these are two different sciences.”⁴⁵ According to Averroes, the method of theoretical medicine is not the same as that of practical medicine. The former depends on established principles of natural philosophy, whereas the latter results from empirical knowledge.

Yet what does one make of the potential contradiction between the two parts of the discipline? Averroes turns to what Michael McVaugh called Avicenna’s instrumentalism:⁴⁶ namely the idea, developed in the *Canon*, that the physician must not search for the causes of phenomena but instead must concern himself with remedies for diseases, even if it seems to contradict the assertions of natural philosophy. For example, in the *General Principles*, when he speaks of the recurrence of crises, Averroes evokes the theory according to which it depends on lunar movements, but he states: “You must know that this is a remote cause, which is not necessary for the physician [to consider].”⁴⁷ Later, regarding the means of knowing the constitution of medications, he declares that while those available to the physician are not sound, they are the only ones that exist. The physician should not, however, abandon all discussion of this subject, but “speak about each thing to the extent possible, for, as Aristotle says,

⁴³ *Paraph. Republic*, at Averroes 1974: 3–4. On this text, see Chapter 12, by F. Woerther, in this volume.

⁴⁴ *Paraph. Republic*, at Averroes 1974: 4. ⁴⁵ *LC Posterior Analytics* 367 (on I 13, 78b40).

⁴⁶ McVaugh 2000.

⁴⁷ *General Principles of Medicine*, at Averroes 1962: X.38r (Bk. 3). It is slightly different in the Arabic version, which reads: “you must know that it is only a remote cause, and that the proximate cause is the one we talked about” (*General Principles of Medicine* 123 [Bk. 3]).

‘one must not ask an orator to demonstrate, or a geometrician to convince’;⁴⁸ to speak about these things only has the objective of making us master, using natural science, the totality of what we need here; but to force ourselves to demonstrate the things we want to discuss now would not be appropriate in this art.”⁴⁹ For him, as for Avicenna, the impossibility for the physician *as a physician* to reach the truth on these questions of natural philosophy is not problematic: it does not prevent him from acting, for example, in the case of the division of the faculties of the soul proposed by physicians that, though false, “seems of little harm in this art.”⁵⁰

These few quotations perfectly summarize what, according to Averroes, we can and must expect from the physician. But Averroes’ conception of medical knowledge is not only negative. To him, medicine has its own means of knowledge: experience. It allows the physician to acquire a knowledge that is not otherwise possible to obtain. Regarding alterations to the body due to atmospheric conditions, he says: “The only way of knowing these alterations is experience, for knowing them by demonstration is difficult, or impossible; and for this reason it is necessary on this topic to gather the testimonies of the Ancients and then give the causes.”⁵¹ The corollary of the rejection of an independent medical theory, notably the Galenic one, is therefore the extreme promotion of concrete practical experience as the foundation of medical knowledge: as Averroes says repeatedly, “experience (*tajriba*) is essential in this art.”⁵² Indeed, the idea that medical reasoning is not strictly scientific implies that the practitioner must always be attentive to the existence of specific cases that are exceptions to the rule. According to Averroes, medicine cannot, by demonstration, reach the truth in all cases: as the Latin physicians after him will declare, for Averroes medicine begins where philosophy ends. Medicine is therefore to be classified among the arts, and not the sciences, since all its scientific content is in another, superior discipline. However, despite medicine’s inability to establish its own principles, its reasoning permits “this opinion and conjecture that physicians call the intuition of the art.”⁵³ One understands therefore that Averroes does not hesitate to compare the physician to practitioners of other arts, such as the astrologist or the judge. This is why, for example,

⁴⁸ Arist, *Nic. Eth.* I 1, 1094b25–27. ⁴⁹ *General Principles of Medicine* 306 (Bk. 5).

⁵⁰ *Ibid.*, 52 (Bk. 2). ⁵¹ *Ibid.*, 210 (Bk. 4).

⁵² *Paraph. On Fevers*, at Averroes 1984a: 209. On the notion of *tajriba*, see McGinnis 2003 and Janssens 2004.

⁵³ *Paraph. On Fevers*, at Averroes 1984a: 209.

when the signs observed by the practitioner are balanced in force and do not allow for a decision between several diagnoses, one must follow the majority opinion, "as the judge (*faqīh*) does for distinct witnesses or the astrologist for distinct forces of stars depending on the diversity of their position."⁵⁴ Here again, Averroes is in full agreement with what Ibn Zuhr proclaims in his *Taysīr*, namely that "the practice of medicine is founded on reflection from practice."⁵⁵ Practice is found at the beginning and at the end of medical science.

Which Medical Theory for Averroes?

This strong stance does not make Averroes an absolute empiricist. He presents himself, rather, as a sort of Aristotelian in medicine: his role is that of a critic of medical doctrine. One must not, however, believe that he is just a narrow-minded zealot of the Peripatetic sect, as is asserted by Pietro d'Abano, who, at the beginning of the fourteenth century, qualifies him as a "quarreler infested by the ancients, a remarkable commentator of Aristotle . . . but filled with a hatred of physicians and particularly of Galen."⁵⁶ Indeed, Averroes does not merely affirm that, in specific cases, "one must follow Galen's point of view," but even sometimes recognizes the superiority of the physician from Pergamon over Aristotle. For example, regarding the movement of the lung, which Galen rightly attributes to the diaphragm and not to a physical process as did Aristotle (who was unaware of the muscle's role), Averroes admits:

In Aristotle's time, the only known usefulness of this member [the diaphragm] was the separation of principal from nutritional members . . . And we should not accuse Aristotle of this defect, for what is known by anatomy is like that which is known for the number of the movements of the spheres: this science was not complete during Aristotle's time. And if in Galen's time the art of medicine was entirely complete, Galen would nevertheless say: "it is not impossible that after me someone will come along who discovers something that I have not discovered in the art of medicine." And for this reason in most cases that we discuss, when Galen contradicts Aristotle, it is not a real contradiction but rather additions and complements . . . and it should not be said that what Galen says of specific things contradicts Aristotle on universal things.⁵⁷

⁵⁴ *Comm. Medical Poem* 280.771.

⁵⁵ Ibn Zuhr 1991: 168.

⁵⁶ Pietro d'Abano 1483: diff. 145.219v.

⁵⁷ *General Principles of Medicine*, at Averroes 1962: X.29r-v (Bk. 2). The Latin version is slightly more detailed than the Arabic: cf. *General Principles of Medicine* 93.

This confession is remarkable, as it shows again the respective places that medicine and philosophy must hold. The advances of one, founded on specific questions – even if, as it happens, anatomy is not really one of them – are not of the same type as the demonstrations of the other. Each of the two disciplines has its autonomy, its method, its discoveries. In fact, despite his zeal to defend Aristotle, Averroes attempts above all to make physicians confront their contradictions. His goal is never to question the concrete practical conclusions they reach, and we would search in vain his works for any criticism, conducted on philosophical bases, of a technical process. In the early eleventh century, in his commentary on Galen's *Tegni*, the Egyptian physician 'Alī ibn Riḍwān criticized Aristotle, accusing him of "making physicians make mistakes." Averroes would obviously never subscribe to such a judgment, not because Aristotle was according to him a better physician than Galen, but because Aristotle's general assertions have no consequence regarding the effective application of treatment, while Galen's incorrect assertions can lead physicians to make mistakes by embarking on philosophical discussions without having mastered the basics.

There are multiple examples of this general attitude. Let us take the example of the location of the sensory power and of the origin of the internal senses. For Galen it is found only in the brain, but for Aristotle the heart is the first principle of all virtues, and the brain is therefore just an instrument. Averroes, in the second book of the *General Principles*, recalls how Galen mocked Archigenes, who also placed the sensitive virtue in the heart: did that mean that the treatment of a memory problem involved cordial medications, or cupping glasses on the chest? Averroes clearly does not like this remark: "I say that this is a criticism more reprehensible than Archigenes' remarks, according to what I have said and what I will declare below, for the heart is the prince of all members."⁵⁸ To Averroes it is obvious that it is necessary to treat memory problems by treating the brain; never does he consider the contrary. And yet this simple fact does not throw general physiological doctrine into question, for it is absurd to align a general theory of living beings and the treatment of specific cases. The link between the brain and the heart is, in this case, similar to that of the eye and the brain: just as the eye is the instrument of vision, the brain is the instrument of the senses, whose principle is in the heart. Averroes thus does not only reproach Galen for these attacks on Aristotle; he also criticizes him for having questioned a physiological theory on the basis

⁵⁸ *General Principles of Medicine*, at Averroes 1962: X.22r (Bk. 2), not present in the Arabic version.

of a therapeutic method developed for specific cases. For Averroes, this method is neither scientific nor sound for therapy, for it can only lead physicians to cast doubts on treatments tested through experience, and therefore to make errors.

Indeed, it seems that Averroes' objective is not simply to contradict Galen on the basis of Aristotelian philosophy but, rather, to make the medical art compatible with Aristotelian philosophy as he interprets it. The problem is simple: to re-establish a coherent physiological and philosophical framework for the discipline, while preserving anatomical or therapeutic discoveries made by generations of physicians since Aristotle. Sometimes, of course, this leads Averroes into making disingenuous remarks. Yet to reduce his attitude to a purely defensive position would be to mistake his true objective, for Averroes does not only oppose physicians; he regularly makes proposals and proves to be innovative. Pharmacology is one of these cases, and the list of his works given above shows that this question particularly interested him. It is, moreover, one of the rare themes in Averroes' medical writings that has attracted historians' attention, most likely due to the originality of his approach.⁵⁹

Among several others, which would be too long to detail, three points interest Averroes: the theory of proportions, the question of "primary quantity," and the question of specific form. The first two are connected, and here Averroes heavily criticizes the theory formulated by al-Kindī. According to the latter, the progression between degrees of medication is geometric, not arithmetical: the proportion between a temperate medication and a medication of the first degree of heat is 1:2, but 1:4 between the temperate and the second degree, 1:8 between the temperate and the third degree, and 1:16 between the temperate and the fourth degree.⁶⁰ Averroes criticizes this theory for several reasons, one being that it does not, according to him, conform to Galenic theory – in this instance, defending Galen against al-Kindī. He prefers a mathematical progression between degrees, increasing by one unit of heat at each increase in degree.⁶¹ But Averroes also adds another element: the primary quantity. According to this theory, a medication does not always produce its effect. For this to happen, it must be administered in sufficient quantity, short of which no action from the substance is possible. In all of this discussion, even if the mathematical detail of Averroes' argument is sometimes confusing, his

⁵⁹ McVaugh 1975; Vázquez de Benito 1999; Langermann 2003.

⁶⁰ McVaugh 1975: 53–74 and Langermann 2003: 351–53.

⁶¹ *General Principles of Medicine* 391–92 (Bk. 5).

objective is clear: to align pharmacology with his construction of an alternative framework for medicine, consistent with the principles of physics.⁶²

Another aspect of pharmacological theory is its adoption of the Avicennian notion of action by specific forms. Let us recall that this theory, exposed by Avicenna in the *Canon* but also in his philosophical works, establishes that a substance may have an action not only through its elementary qualities (hot or cold, moist or dry) but also through “all its substance” or “all its form.”⁶³ A recurrent example in Avicenna is the magnet: it attracts iron not through its elementary qualities, but by its specific form of magnet.⁶⁴ The action proper to such a form is, to Avicenna, impossible to predict through reason: it can be known only through experience. Avicenna introduced this notion for philosophical reasons (notably physical and ontological) as much as medical ones. Without developing the first point, we will simply note that in a medical context, the specific form had the advantage of allowing the integration, without any problem for the general theory, of specific effects of medication observed by experience but difficult to connect to the primary qualities of hot or cold, moist or and dry. Consequently, despite criticism pointing to its tautological aspect, the notion met with great success.

Despite his many reservations concerning Avicenna, in this case Averroes makes extensive use of specific form. Accordingly, in his treatise on poisons he affirms: “All deadly species are of two kinds, in which the species are practically infinite. The first kind includes those that kill by specific form . . . The second kind is that of those which kill by the form of complexion, that is to say by their primary qualities.”⁶⁵ Likewise, in the *General Principles*, Averroes explicitly uses the example of magnet and iron to assert that this action is due not to heat but to the magnet’s own quality. In the same way, many medications do not act on account of the complexion, and in this case “it is impossible to know the measure of a mixture by a judgment . . . in the same way as we know the operations that come from matter”: it is necessary to know them through experience.⁶⁶ Although Averroes does not adhere to the Avicennian philosophical principles that underlie the notion of specific form, he nevertheless employs that notion in medicine. The reason for this incongruity seems to be that it

⁶² Cf. Langermann 2003. ⁶³ Stone 2008; Weill-Parot 2013.

⁶⁴ Avicenna 1877: I.95 (I. 2.2.1.15). ⁶⁵ Averroes 1524: 204r.

⁶⁶ *General Principles of Medicine*, at Averroes 1962: X.92v (Bk. 5). The Arabic version is slightly different; cf. *General Principles of Medicine* 295. Same idea in *Comm. Medical Poem* 73.

tallies perfectly with Averroes' conception of strictly medical knowledge. Specific form can be known only through experience and the frequent observation of specific cases. It therefore allows physicians to exercise their art without the need to discuss or question the foundations of the physical explanation of the world.

Does Averroes come to a coherent pharmacological theory? Probably not. But his interest in the subject allows him better to distinguish the different types of medications, in a field where it was difficult to connect, on one hand, the practical application of recipes drawn from an old and largely empirical tradition and, on the other hand, a theory that in most cases added onto it a posteriori. One last example, coriander, is quite illuminating. For Galen, Serapion, Avicenna, and other physicians, coriander was to be classified among poisons due to its excessive heat; but because of its properties as a medication to treat the heart, they presented it as a sort of intermediary between poison and medication. This position was probably acceptable for Galen, for whom there was no fundamental distinction between poison and medication, both functioning in the same way and both designated by the same term (*pharmakon*).⁶⁷ For Averroes, however, it was quite different. Basing his position on the Aristotelian definition of the middle (which can come only between two extremes of the same kind), he explains that there can in no case be a middle between a remedy and a poison that are not of the same kind.⁶⁸ Here Averroes urges physicians to distinguish the natures of substances, which will lead them to provide a better definition of poison – or even, in the Latin world, to entirely distinguish it from medications that heal the body, against Galen.⁶⁹

Conclusion

Averroes' influence on subsequent Arabic medicine is little known. The circulation of his *Comm. Medical Poem* is quite remarkable, but it is not in this work that Averroes is most innovative. The *General Principles*, which he most likely considered to be his greatest medical work, had less success. It is preserved in only five manuscripts, most of which are quite old, even dating to Averroes' time.⁷⁰ Last, his commentaries on Galen, which are preserved in only a single manuscript, have remained largely unknown. In fact, as in the case with his philosophy, Averroes' medical work would have

⁶⁷ Touwaide 1994.

⁶⁸ *General Principles of Medicine* 297 (Bk. 5).

⁶⁹ Chandelier 2010.

⁷⁰ Four of the five manuscripts are from the twelfth and thirteenth centuries.

a greater posterity in the Western world. His principal works were translated into Latin at the end of the thirteenth century: the *Comm. Medical Poem* in 1284 in Montpellier by Armengaud Blaise, and the *General Principles* in 1285 in Padua by Bonacosa. These works had an immediate impact in the West: there are approximately fifty remaining Latin manuscripts of the *General Principles*, excluding numerous excerpts and several summaries, and approximately thirty Latin manuscripts of the *Comm. Medical Poem*. Of course, Averroes' attacks on the medical tradition were far from being universally accepted, and for Arnald of Villanova at the end of the thirteenth century, Averroes "was mistaken in all of his attacks on Galen."⁷¹ Yet the text was widely read and even integrated into the university curriculum. The University of Bologna in 1405 included several sections of the *General Principles* in the list of readings assigned to students, primarily in physiology and pharmacology (books 1, 2, and 5).⁷² We may of course wonder about this choice, because these sections were those where Averroes seemed to make the most important departures from the Galenic tradition. In this we can probably see the importance of Averroes' role as a subversive thinker.⁷³ By putting well-accepted theories of physicians in doubt and by proposing a more restrictive definition of medicine that was also more liberating than Avicenna's, Averroes favored the autonomy of the discipline while promoting extensive experimental research, the only method capable of affording real medical knowledge. This is no small paradox: despite his often-rebuffed attacks and despite his lack of interest in the technical aspects of practical medicine, Averroes had an extremely profound and rich influence on medicine up to the threshold of the early modern period.

⁷¹ Arnald of Villanova 1975: 201.

⁷² Jacquart and Micheau 1990: 194–95.

⁷³ Ibid., 182–85.

*Averroes' Natural Philosophy as Science of Nature**

Cristina Cerami

Reasoning bears witness to the phenomena and the phenomena bear witness to reasoning.

– Aristotle, *De Caelo* I 3, 270b4–5

One of the most fundamental issues concerning Aristotle's natural philosophy is undoubtedly the question concerning the kind of method used in his scientific corpus devoted to the study of nature. This topic has been much debated during the past sixty years and is still a central focus of Aristotelian scholarship.¹ In this context, since the publication of the pioneering article of G. E. L. Owen, presented for the first time in 1960 at the second Symposium Aristotelicum,² the debate has centered on the epistemological nature of physical inquiry, in particular on the kind of investigation leading to the principles of natural beings.

According to Owen's hypothesis, which has dominated scholarship for a long time,³ Aristotle advocates two different patterns of inquiry, depending on the kind of object of knowledge to be acquired: a dialectical inquiry in the case of the principles of natural beings and a proper scientific investigation in the case of observable phenomena. In fact – argues Owen – the principles of natural beings and notably their first principles, *as such*, cannot be the result of prior deductive knowledge, but they can be established through a dialectical inquiry. In this sense, the *Physics* in particular must be taken as a paradigm of Aristotle's use of dialectical method, understood as a largely conceptual or a priori technique of inquiry.

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¹ For a reconstruction of this debate, see Cerami 2015a: 27–33. ² Owen 1961 and 1970.

³ Cf. Wieland 1962 and Irwin 1988, who uses in this context the expression “strong dialectic”; Bertl 1991; Charlton in Aristotle 1992; Shields 2007; and to some extent Mansion 1946.

Although Owen's hypothesis has been challenged subsequently⁴ and is nowadays dismissed in its broadest version by most scholars, the question concerning the place of dialectic in Aristotle's natural philosophy is not entirely settled. More recently, Robert Bolton has claimed that dialectical reasoning is for Aristotle a necessary recourse in examining a certain number of scientific problematic issues, where there is insufficient empirical data available to scientists.⁵ This is the case for several *aporiae* proper to the science of heavens, i.e. Aristotelian astronomy. Owing to the distance and to the very nature of the kind of beings studied by astronomy, which has a completely different matter than sublunary beings (viz. the so-called fifth element), natural scientists must appeal to what is merely "reasonable" (*eulogos*) in solving certain puzzles occasioned by these phenomena, rather than to irrefutable empirical data available in other branches of natural science, especially in biology. Thus, according to Bolton, this part of physics has a lower scientific level than the other branches based on indisputable empirical data.⁶

As for almost all issues debated by modern Aristotelian scholarship, the difficulty concerning the method used by Aristotle in supporting or validating his physical theories has been an inescapable question for all his ancient and medieval readers since Theophrastus. We find extensive discussions about the kind of method leading to first principles in general and to the principles of nature in particular in almost all Greek commentaries on Aristotle's natural treatises.⁷ In the present contribution I would like to present Averroes' answer to this question and show that on it hinges not only his reading of Aristotle's physics, but also Averroes' understanding of any philosophical approach to nature.⁸

The literary genre of the philosophical commentary and the way in which Averroes accomplishes his task as a commentator make the reconstruction of his doctrine much more difficult than for other authors. Indeed, we find very few programmatic claims in his commentaries, concerning questions of either method or doctrine. Nevertheless, it would be mistaken to assume that Averroes has no coherent philosophical agenda while commenting on Aristotle. The question of the epistemological status of natural philosophy is a case in point. In order to establish what is at stake in this topic, one has to look throughout Averroes' commentaries,

⁴ Cf. Bolton 1987 and 1991; Dalimier 1998; Pellegrin in Aristotle 2000.

⁵ Bolton 2009.

⁶ For a critique of Bolton's hypothesis, see Cerami 2015a: 33–43.

⁷ For instance at Simplicius, in *On the Heavens* 510.19–31. For other passages, see Sorabji 2005.

⁸ The following analysis is in part a synthesis of my study of Averroes' doctrine of substantial generation in Cerami 2015a.

especially at passages corresponding to crucial junctures in the Aristotelian corpus. As expected, concerning this issue, the so-called long commentaries (i.e. the literary commentaries) on the *Physics* and *On the Heavens* constitute the main source for our reconstruction. We will find in them the gist of Averroes' mature doctrine concerning the epistemological status of natural philosophy.⁹

In outline, Averroes' solution is to maintain that natural philosophy, at each level and in all its fields, meets the epistemological criteria of a full-fledged science. Dialectic, in a strong or a weak sense of the term, does not play any genuine role in the discovery of the real scientific results of physics.¹⁰ With regard to the data and the method used, as well as to the goal pursued, natural philosophy has no need to appeal to any dialectical procedure or to draw on material more general in scope than what is proper to its field, that is, beings endowed with an internal principle of movement. In this perspective, Averroes' greatest effort is devoted to ascertaining that natural philosophy is a real autonomous science, insofar as it meets all the epistemological criteria of Aristotle's *Posterior Analytics*.

In order to set up this scientific account, Averroes assumes that natural philosophy has a real empirical foundation that provides it with a reliable basis for inquiry. All knowledge concerning natural beings is, for Averroes, essentially rooted in sense-perception. This, I hasten to say, does not mean that *everything* concerning natural beings is accessible through perception alone, but that no principle whatsoever, including the first principles common to all sciences, is established through a sort of a priori knowledge or a lower form of argument deriving from dialectic. In the case of the first principles of natural beings, as in the study of the celestial world, empirical data constitute for Averroes not only the starting point of the inquiry, but also the necessary and the ultimate authority for testing and judging the merits of a physical theory.

The scientific procedure in natural philosophy consists, then, in analyzing and arranging these data by using proper analytical tools, such as the

⁹ As the studies of H. A. Davidson, J. Puig-Montada, R. Glasner, and G. Freudenthal have shown, a different picture could be derived from the commentaries written by Averroes in his youth, which are deeply influenced by al-Fārābī and Avicenna. I will not consider this part of Averroes' production, since in his mature writings he abandons the main tenets of their philosophy, and notably of Avicenna's emanative system.

¹⁰ This does not mean that according to Averroes dialectic plays no role in the path toward the scientific knowledge. For it is clear that dialectic, as a universal method (i.e. an inquiry into all beings), has an important role in discovering premises of arguments (notably in the part concerning the topics of accident), as well as in testing them and rejecting the mistaken ones. On the positive role of dialectic, see Hasnawi 2013 and 2009.

inference called *sign*, induction, and analogy. Even when the empirical data are not per se conclusive and even if these epistemological tools do not possess the same convincing force of an “absolute demonstration” (viz. the Aristotelian *apodeixis*), the “alliance” between these two, i.e. the empirical data and these arguments, provides the basis for a real scientific explanation. In this context, Averroes strongly asserts that all such regressive procedures belong to Aristotle’s theory of demonstration.

Even a sketchy survey of Averroes’ commentaries on Aristotle’s physical treatises displays the prominence accorded to this topic. It is not farfetched to claim that, according to Averroes, the task of establishing the scientific autonomy of natural philosophy constitutes one of the main goals of the “philosopher of nature,” if not one of the main challenges of any philosophical project. In what follows, we will see that the relevance of this question must be explained in light of the historical and polemical context of Averroes’ project. I will suggest that in this context Avicenna is not the sole, or most dangerous, opponent of Averroes’ philosophical project. Averroes’ effort to conform natural philosophy to the scientific canon of the *Posterior Analytics* and to defend its empirical foundation must be interpreted as a part of his general plan to refute Ash‘arite theological occasionalism. His dispute with Ash‘arite theology, in particular with al-Ghazālī, reveals a new stake in the debate on the scientific foundation of natural philosophy proper to Arabic Aristotelianism. It is not possible to appraise Averroes’ exegetical and philosophical position without taking into consideration this historical and intellectual background.

In order to confirm this exegetical hypothesis, I will first outline Averroes’ account of natural philosophy as a demonstrative science. Then, I will examine the case of the first principles of natural being, in particular prime matter, and single out the kind of analytical procedure leading to its apprehension. Finally, I will consider the question concerning the kind of inquiry proper to the science of the heavens, to conclude that in this case too, Averroes is not willing to assume a lower standard of argumentation in the discovery of the scientific results proper to natural philosophy.

The Epistemological Status of Natural Philosophy

Aristotle stipulates the criteria that any genuine scientific knowledge must meet in the first book of his *Posterior Analytics*, especially in chapters 1–10. According to this scientific canon, there are at least four conditions that a real autonomous science (i.e. any nonsubordinate science) has to fulfill:

(1) it must deal with a single subject matter whose existence it takes for granted,¹¹ (2) it must study the per se accidents of its subject matter,¹² (3) it must demonstrate through causes that these per se accidents belong to the subject matter,¹³ and (4) it must possess a finite set of proper principles that are neither established by another higher science nor demonstrated in an absolute sense within the same science.¹⁴

In the same chapters, Aristotle makes clear that conditions 2 and 3 are satisfied by using a specific kind of logical procedure that he calls "demonstration" (ἀποδείξις). He states that the demonstrative character of this logical procedure follows from "what constitutes it," i.e. the premises, which always exhibit a certain predication linking an attribute to a subject. Concurrently, he singles out the prerequisites of the premises of a demonstration and states that in order to be demonstrative, (i) the premises must be causes of the conclusion that derives from them; (ii) they must be appropriate to the conclusion itself; (iii) they must be true; (iv) they must be more familiar than the conclusion, i.e. already known; and (v) they must be not only prior to the conclusion but also primitive, i.e. prior and immediate.¹⁵

Subsequently, Aristotle points out that these features of demonstrative premises are in a sense integrated into one single condition that states the necessary character of the demonstrative premises. Even if it is not clear what kind of necessity Aristotle is alluding to,¹⁶ all of chapter I 4 seems to provide an account of the kind of predication a demonstrative premise must exhibit in order to be necessary: (a) the attribute predicated must belong to the whole subject, (b) it must belong per se to the subject, and (c) it must belong to it universally.¹⁷

This set of conditions, concerning the subject that scientific knowledge deals with, the procedure leading to its goal, and the goal itself, provides the discriminating criteria between a science that is genuine and one that is not. To these conditions the Arabic translation of the *Posterior Analytics* adds a supplementary requirement, stating that a real demonstration (in Arabic *al-burhān*) must produce the cognitive state of certainty in the soul of the knower.¹⁸ This condition is attested in the Greco-Arabic translation realized by Abū Bishr Mattā (d. 940) and in the anonymous translation transmitted with Averroes' *LC Posterior Analytics*. The same condition can

¹¹ Aristotle, *Post. An.* I 7, 75a39-b2; I 9, 76a12; I 28, 87a38-39. ¹² Ibid., I 10, 76b11-16.

¹³ Ibid., I 2, 71b9-12. ¹⁴ Ibid., I 9, 76a8-17. ¹⁵ Aristotle, *Post. An.* I 2.

¹⁶ Barnes 1993: 110-11. ¹⁷ Aristotle, *Post. An.* I 4. ¹⁸ On this condition, see Black 2006.

be found in al-Fārābī's works, which were definitely to constitute one of the major sources for the ensuing Arabic Aristotelian tradition.

The addition of the condition of certainty is not the only relevant feature of the Arabic translation that influenced the transmission and the reception of Aristotle's epistemology. It is important to remark that the Arabic translation played a crucial role in the interpretation of almost all the conditions set forth by Aristotle.¹⁹ With this caveat in mind, it is neither simplistic nor exaggerated to state that Averroes' general project consists in adapting the scientific canon of the *Posterior Analytics* to natural philosophy.

To grasp the significance of such a project, it should be emphasized that for Averroes it is not a matter of using "the apodictic paradigm" to discriminate between different patterns of inquiry in physics, that is, between a genuinely scientific standard and a nonscientific one. In fact, contrary to the general trend of modern scholarship, Averroes does not want to limit the scientific contribution of the natural philosopher to the apodictic part of the inquiry, nor is he willing to consider that what is not apodictic is dialectical. He wants to provide a broader interpretation of the notion of scientific knowledge and of demonstration, so as to assign a genuine scientific character to all tasks of the philosopher of nature, and finally claim that its scientific foundation lies in sense-perception. I would like first of all to corroborate this interpretative hypothesis by briefly setting forth the essential elements of Averroes' adaptation, before moving on to consider the more specific cases of the first principles of nature and of celestial phenomena.

With regard to Averroes' account of the epistemological status of natural philosophy, two texts are crucial: his prologue to the *LC Physics* and the part of the same commentary relative to *Physics* I 1.²⁰ In these texts, it is clear that Averroes is intent on showing that natural philosophy fulfills all the requirements of a full-fledged science: it has its own subject matter, whose existence it takes for granted (condition 1 of the *Posterior Analytics*) and of which it studies the per se accidents (condition 2 of the *Posterior Analytics*),²¹ and it has a finite set of proper principles that are not demonstrated by a higher science²² (condition 4 of the *Posterior Analytics*) and through which it demonstrates that the per se accidents belong to its

¹⁹ On other crucial cases, see Bertolacci 2007; Cerami 2016a. ²⁰ *LC Physics* 1B–5F.

²¹ Aristotle, *Post. An.* I 7, 75 b1–2; I 10, 76b11–16. ²² Aristotle, *Post. An.* I 9, 76a8–17.

subject matter (condition 3 of the *Posterior Analytics*).²³ Let us see how natural philosophy fulfills these conditions on Averroes' account.

Following Aristotle's guidelines in *Physics* I and II, Averroes makes clear that sensible species (*species sensibiles*), that is, sensible beings known by sense-perception (*res sensu cognitae*) that change by themselves and have in themselves the principle of motion and rest, constitute the subject matter of natural philosophy. He points out that this kind of being encompasses several classes, all of which share some properties and a certain number of principles and causes, while they differ in respect of their specific properties and proper causes. He concludes that for this reason, natural philosophy falls into two parts: a general inquiry, to which Aristotle's *Physics* is devoted, and several specific inquiries according to the different kinds of natural beings, which occupy the rest of Aristotle's natural corpus. Concerning the order of these two kinds of inquiry, Averroes emphasizes that in natural philosophy, as in other sciences, a general inquiry must precede specific inquiries. This order constitutes another essential constraint to be met by natural philosophy in order to be a real science.²⁴

Having put forward this distinction, Averroes states that in the general as in the specific inquiries, the natural scientist has a twofold goal: to investigate the causes and the principles of the different kinds of natural beings and to elucidate their per se attributes or, according to the Arabic terminology, their essential attributes (*al-a'rād al-dhātīyya*), or per se accidents, which include the so-called concomitants (*al-lawāḥiq al-ʿamma*) and the consequents of the being studied.²⁵

In elucidating the first goal, Averroes puts forth an additional division between "kinds" of causes and "ranks" of causes. Following Avicenna, but ultimately the Greek commentary tradition, he considers the four Aristotelian causes as kinds or types of causes and assumes that in each kind there are series of "individual" causes – ordered according to the scope of their influence – which terminate in four primary causes common to all natural beings: a first efficient cause, a first final cause, a first form, and a first matter. Subsequently, he makes clear that the task of the physicist is not restricted merely to the investigation of the four kinds of causes and of all proximate causes of natural beings but is further limited to the study of two first causes among the four, i.e. the first matter and the first efficient cause.

²³ *LC Physics* 1C–G.

²⁴ On this condition, see Cerami forthcoming (b).

²⁵ Cf. *LC Physics* 1G, 3C–G.

Concerning the second goal, he also points out that to this multilayered causal research corresponds a multilayered study of per se accidents of natural beings. At the general level of his inquiry, the physicist deals with the concomitants common to all these beings (notably, place, time, movement, the infinite, and the continuum), while in his specific researches, he examines and makes plain the concomitants and essential attributes belonging to each class of natural beings.

In so doing, Averroes attests that natural philosophy satisfies conditions 1 and 2 of the *Posterior Analytics*. Ensuring that natural philosophy fulfills conditions 3 and 4 requires a greater exegetical effort. These two conditions are essentially linked and concern more properly what Averroes designates as “the method” or “the way” of natural science. In this case too, he strives to ascertain that in demonstrating per se attributes, as in establishing proper principles, the natural philosopher must appeal to the procedures of Aristotle’s *Posterior Analytics*.

Within this framework, two major difficulties threaten the legitimacy of this part of Averroes’ project. For one thing, the possibility – which in certain texts Aristotle seems willing to admit – that a universal superior science ascertains the principles of natural philosophy, as well as other particular sciences, seems to jeopardize the autonomy of natural philosophy. For another thing, the almost complete absence of apodictic syllogisms in Aristotle’s natural treatises could lead one to assume that the *Posterior Analytics* does not provide a scientific paradigm for this part of physical inquiry.

Averroes follows a single strategy to solve these difficulties and to achieve his overall project. He elaborates a more encompassing concept of demonstration, which includes the logical procedure that, according to Averroes, leads to the proper principles and causes, as well as the inference through which, once the cause is obtained, it is possible to demonstrate that a per se accident belongs to its subject. Averroes claims that these two syllogisms, which he calls following Greco-Arabic terminology “the sign” and “the demonstration of the cause,” are two further demonstrative procedures, alongside the apodictic syllogism, called absolute demonstration.²⁶ As for the other points made by Averroes, in fact, this doctrine has its sources in the Greek commentary tradition and in its Arabic reception.²⁷

²⁶ On the three kinds of syllogism, see *Ep. Physics* 9.7–16.

²⁷ On this threefold division and notably on the syllogism called “sign,” see Elamrani-Jamal 2000 and Hugonnard-Roche 2002. For a detailed analysis of this theory in *LC Posterior Analytics* (I 2), see Di Giovanni 2009. On the influence of al-Fārābī on Averroes’ doctrine and its application to natural

We find the most accurate presentation of this doctrine in Averroes' commentary on the *Posterior Analytics*. Here, Averroes makes clear that the demonstration called *sign* and "the demonstration of the cause" correspond, respectively, to the Aristotelian proofs of "the fact" (ᾧτι) and of "the reason why" (διότι), while the Aristotelian *apodeixis* is identified with the so-called absolute demonstration. The three kinds of syllogism differ according to their premises and to their conclusions: while the sign's premises are constituted by properties that are "posterior" by nature (i.e. that are actually the effect of the real cause), and its conclusion provides the cause (which is prior by nature to the effect) of these same properties,²⁸ the premises of the demonstration of the cause contain the property that is cause and its conclusion provides the effect of the cause.²⁹ As for the absolute demonstration, its premises must be at the same time prior for us and prior by nature. This is the case, Averroes explains, of all mathematical demonstrations.

Against Avicenna, he argues that even if the three demonstrations do not produce the same degree of conviction, the demonstration of the sign, which is the only way to prove the existence of the proper principles of a science, produces, as he states, a genuine form of certainty.³⁰

In the same commentary, Averroes puts forward the reason why in all cases we speak of "demonstration" and not merely of "argument" or "inference." For, in all three kinds of proof, the premises convey a necessary predication. In the premises of the three demonstrations, in fact, we find a necessary predicate of the subject, even if the necessity in question is not of exactly the same order. Concerning the sign in particular, Averroes clarifies that its premises contain an attribute that belongs to the subject per se, in the second sense of per se among the four outlined by Aristotle: the predicates whose definition contains the subject of the predication. He states that this kind of predicate, even if it is called "per se accident," is a real necessary affection of the subject, which makes the premises of a sign, and as a consequence the entire argument, necessary.³¹

philosophy, see Cerami 2015a: 320–25. On the Greek antecedents of the doctrine of sign, see Morrison 1997.

²⁸ For instance: planets do not shine; what does not shine is near to the earth; therefore planets are near to the earth.

²⁹ For instance: all sap-coagulating plants are short-lived; all broad-leaved plants coagulate sap; therefore all broad-leaved plants are short-lived.

³⁰ For a translation of some relevant passages, see Hugonnard-Roche 2002.

³¹ On this doctrine, see Cerami 2016a.

This doctrine is reflected in the way Averroes portrays the sign in the context of natural philosophy. In the *Prologue* of the *LC Physics*, as in the commentary to the first chapter,³² Averroes makes clear that even if it is possible to find “absolute demonstrations” in natural philosophy, these demonstrations are used quite rarely in this science and by no means to establish its proper principles. The sign is the only way to establish the first principles and, more generally, the causes of observed phenomena. Taking the parallelism with the *LC Posterior Analytics* one step further, he defines the natural sign not simply as a way to go back from the phenomena to the causes but as a syllogism that “proceeds from” – that is, uses as a middle term – “the consequents”³³ and the “proper accidents” of natural beings.³⁴

In this way the first difficulty is solved, and condition 4 satisfied. Averroes admits, following Aristotle’s teaching, that natural philosophy, as all particular sciences, cannot demonstrate its own principles in an absolute sense. However, this does not mean, according to him, that another higher universal science can do so, since this would imply that physics is a subordinate science. Thus, contrary to what Avicenna repeatedly claims in his *Kitāb al-Shifā’*,³⁵ Averroes argues that nothing prevents one from assuming that physics, as a particular science, demonstrates the existence of its own principles, provided that it does it by a sign and not by an absolute demonstration; while the universal science, i.e. metaphysics, clarifies the essence of one of these principles, i.e. the first mover.³⁶ In distinguishing these two aspects of the study of first principles, Averroes clearly has in mind another doctrine established in the *Posterior Analytics*, according to which knowing whether something is the case (εἰ ἔσται) and knowing what it is (τί ἔσται) are two distinct steps in scientific inquiry.³⁷ In the case of prime matter, as we will see, it is among the tasks of the philosopher of nature to demonstrate its existence and clarify its nature.

According to the same paradigm, natural philosophy satisfies condition 3. For, once the existence of the cause is established through a sign, the philosopher of nature can use the cause as a middle term in a demonstration concluding that a certain property belongs per se to its subject. By this

³² Cf. *LC Physics* 4B–G; cf. 6K–7B. ³³ *LC Physics* 7C–D (Bk. 1, comm. 3).

³⁴ *LC Physics* 56 M–57B (Bk. 2, comm. 22).

³⁵ On Avicenna’s doctrine concerning the epistemological status of natural philosophy, see Hasnawi 2002.

³⁶ On the debate between Avicenna and Averroes on the demonstration of the existence of God, see Bertolacci 2007 and Cerami 2014.

³⁷ Aristotle, *Post. An.* II 1, 89b23–25.

procedure the physicist demonstrates by the cause that an essential attribute holds of a certain natural being.

Assuring that natural philosophy meets all the requirements of the *Posterior Analytics*, Averroes declares that natural science is a "perfect" science. Following the Arabic translation of the *Physics*, which, like that of the *Posterior Analytics*, uses the terminology of certainty to define knowledge of nature,³⁸ Averroes identifies perfect science as the cognitive state associated with certitude and concludes that natural philosophy is among this kind of knowledge.³⁹

In defending this theory of demonstration, Averroes explicitly attacks Avicenna and rebuts his "verticalistic" system of science. It would be misleading, however, to believe that he is the only and ultimate target of Averroes' philosophical project. The effort of establishing the autonomy and the a posteriori foundation of natural philosophy is part of a larger project aiming at rebutting al-Ghazālī's attacks against philosophy. This becomes clear when we take a step back and try to understand the ultimate consequences of Avicenna's system of science according to Averroes. One aspect of this polemical stance appears clearly when Averroes discusses the nature of another necessary tool of the physicist: induction.

In the *Prologue* of the *LC Physics*, Averroes makes clear that, besides the three kinds of demonstrations just mentioned, the physicist has at his disposal five scientific instruments that Averroes calls "types of instruction":

The types of instruction [in this science] also include that which is by definition, by division, by enthymeme, by induction, and by example; for the demonstrative arts may use all these five types in the manner mentioned in the *Posterior Analytics*. The use of example and induction is in a manner other than the manner in which the art of dialectic and the art of rhetoric use them, i.e. dialectical induction and rhetorical example.⁴⁰

This statement confirms Averroes' project of ridding natural philosophy of dialectic. Averroes stresses that although these five procedures, notably induction and example, are used in physics as well as in dialectic and in rhetoric, in the former discipline they must adhere to the conditions of real

³⁸ On this point, see Cerami 2015a: 291–94. ³⁹ *LC Physics* 5M–6A (Bk. 1, comm. 1).

⁴⁰ I quote here the Arabic-Hebrew translation of the commentary in Harvey 1983: 81–82. The same text is also translated in Latin from Hebrew by Jacob Mantino in the Giunta edition, which also contains the medieval Arabic-Latin translation of this prologue by Theodore of Antioch. In the Latin translation, though, only four methods are mentioned: definition, division, induction, and example (cf. Averroes 1962: IV.4C).

science as established in Aristotle's *Posterior Analytics*. As we will shortly see, the rest of the *LC* reveals that scientific induction – or as Averroes also names it “complete induction” – has a primary role to play in natural philosophy. Before going into this, however, we have to understand what exactly differentiates the two kinds of induction according to Averroes.

A thorough examination of Averroes' commentaries shows that on this point, too, Averroes is indebted to al-Fārābī's epistemic system, in particular to his distinction between complete and incomplete induction.⁴¹ In a number of crucial passages, Averroes appeals to this doctrine, and he makes it clear that an induction must be “complete” to be scientific. As in al-Fārābī, this does not mean that in order to confirm a certain statement the physicist must go through all individuals of the class considered, which is impossible, but that the physicist must verify that the statement is true of all species belonging to the class under examination. To this “quantitative” condition Averroes adds that the predication verified by induction must also be essential in the same sense put forward in the case of the premises of sign: the predicate must belong per se to the subject in question.⁴²

In this case too, this doctrine is well established in the *LC Posterior Analytics*. In this commentary, Averroes discriminates between a dialectic induction – carried out by the imaginative faculty – and a scientific induction; he claims explicitly that only scientific induction, since it is complete, can produce the cognitive state of certainty (*yaqîn*) in the knower. Throughout the commentary, he emphasizes that all self-evident universal scientific propositions are grasped by this kind of induction and that “the foundations of all science lie in sense-perception.”⁴³

Concerning natural philosophy in particular, Averroes assures us that we need induction to attain its first principles, when commenting on Aristotle's statement that the person who lacks a sense also lacks the universal knowledge proper to this sense:⁴⁴

We need induction in the two kinds of propositions, I mean those which are taken with matter, i.e. the propositions of natural philosophy, and those which are taken without matter, i.e. the mathematical propositions. Most of the latter are among the common propositions about which we do not know when and whence they come about. This aspect pertains to the two kinds of propositions, I mean that they need sense-perception. Due to the obscurity of this question concerning general propositions, the theologians

⁴¹ On al-Fārābī's theory of induction, see Lameer 1994: 133–75.

⁴² For a more detailed analysis of Averroes' theory of induction, see Cerami 2015a: 316–53, and 2015b.

⁴³ For a detailed analysis of these passages, see Cerami 2015b. ⁴⁴ Aristotle, *Post. An.* I 18.

of our religion believed that intellect does not need any appeal to sense-perception in order to grasp them.⁴⁵

In this passage, as in what precedes, Averroes states plainly that the proper principles of natural philosophy, as the first principles common to all sciences, are grasped by induction and through sense-perception. In affirming this, he also reveals the ultimate target of his scientific project: al-Ghazālī and Ash'arite theology. Very roughly, according to Ash'arite doctrine, man needs no appeal to sense-perception, since all he knows about nature ultimately derives from God's unconditioned choice. God can make us knowledgeable without any previous empirical experience, as He can make sensible things act on and be affected by each other without such things possessing their own power of acting and being affected.

In Averroes' view, admitting, as Avicenna suggests, that the regressive methods at the disposal of natural philosophy do not produce genuine certainty could lead to the same conclusion as that of al-Ghazālī and undermine not only Aristotelian philosophy, but more generally the very ground of human knowledge. Even if we can still doubt the soundness of Averroes' worry and the faithfulness of his reading of Avicenna, it must be admitted that it is in order to rebut Ash'arite epistemology and to guarantee the legitimacy of human knowledge that Averroes states the *a posteriori* foundations of natural philosophy.

The way in which Averroes understands the proof establishing the existence of the first principles of nature, in particular prime matter, will confirm this general account and clarify at the same time the link between the demonstration called sign and scientific induction, as well as the role of two other "types of instruction" in natural philosophy: division and analogy.

The Way to the First Principles of Nature: Prime Matter

As we have already pointed out, according to Averroes, natural sign is the only kind of demonstration proving the existence of the first principles of nature, i.e. prime matter and the first unmoved mover, and generally speaking of the proper principles of this science. Complementary to this part of the study of the principles is the inquiry into their proper "nature" or, to use Averroes' terminology, their "essence" or "substance." We have also seen that, concerning the first principles of nature, Averroes claims

⁴⁵ *LC Posterior Analytics* 417.11–17.

that while the study of the essence of the first unmoved mover is assigned to the metaphysician, the study of the kind of being proper to prime matter is the task of the natural philosopher. A detailed presentation of Averroes' unfolding of these arguments goes beyond the limits of this chapter.⁴⁶ I will confine myself to addressing two crucial aspects of the study devoted to prime matter: the role of division and complete induction in the proof of its existence, and the use of analogy in the clarification of its nature.

Averroes assumes that Aristotle's demonstration of the existence of prime matter is part of the analysis of substantial generation in *Physics* I. In his commentary on this book, however, he does not provide a clear reconstruction of this in terms of a sign. In fact, he seems more interested in highlighting the role of induction in the overall argument. At each step of the argument, Averroes emphasizes that induction is the scientific tool used to certify the non-self-evident premises necessary to establish the existence of prime matter. I will briefly set forth this aspect of Averroes' reading, before moving on to the inquiry into the "substance" of prime matter.

According to Averroes, in order to establish the necessary existence of a first substrate for all generation, Aristotle must verify two propositions that constitute two premises of his general argument: (1) "everything that comes to be comes to be from opposites" and (2) "everything that comes to be comes to be in a substrate." Concerning both statements, Averroes claims that they are not self-evident and must be ascertained by induction.

According to Averroes' reading, the first proposition is verified by Aristotle in *Physics* I 5. In order to prove it, Averroes states that Aristotle has to verify that opposites exhibit the same properties as principles: (i) they do not come to be from another thing (otherwise they would not be first), (ii) they do not come to be from one other (otherwise they would be both principles *and* not principles), and (iii) everything else comes to be from them. Averroes argues that the first two statements are self-evident. That is why Aristotle produces an argument (a λόγος, in the Greek text) to prove its validity. This argument – claims Averroes – is an induction,⁴⁷ which aims at demonstrating the universal character of the statement.⁴⁸

It must be noticed that there is nothing in the Greek text nor in the Arabic translation that urges Averroes to suggest this reading. Aristotle uses

⁴⁶ On the general argument proving the existence of an ultimate unmoved mover, see Twetten 1995 and 2007. On Averroes' insistence on the analytical character of this sign, see Cerami 2015c.

⁴⁷ *LC Physics* 271–K (Bk. 1, comm. 42). ⁴⁸ *Ibid.*, 29H (Bk. 1, comm. 47).

the generic term λόγος,⁴⁹ and Ishāq ibn Ḥunayn translates it with the term *al-qiyās*.⁵⁰ Averroes' choice is in this sense deliberate.

A few lines further on, Averroes defines the nature of this induction and states, using al-Fārābī's terminology, that it must be a complete induction: an induction that surveys all kinds of generation, that is, substantial and accidental generation, as well as simple and composite generation.⁵¹ We understand thus that the "completeness" of the survey is based on the preliminary division of change into four categories (i.e. substance, quality, quantity, and place) and, within the category of substance, on the division of natural body into simple and composite.

Although Averroes does not rephrase Aristotle's argument in syllogistic terms, this can be done easily:

- M Principles are that from which everything else comes to be
- m Opposites are that from which everything else comes to be
- ⊢ Principles are opposites.

It thus becomes evident that Aristotle's argument, according to Averroes' reconstruction, is a *sign* and that the universal proposition verified by the aforementioned induction is its minor premise.

Concerning proposition 2, i.e. "everything that comes to be comes to be in a substrate," Averroes also makes clear that it must be verified by induction. The validity of the proposition depends on the possibility of conceiving any kind of generation as a gradual process consisting in the replacement of one opposite by another through a finite string of intermediate properties. Aristotle has to prove that at each moment of the process it is necessary to assume the existence of a substrate for the different properties.

This statement – asserts Averroes – becomes manifest by first considering the very nature of generation,⁵² then by induction.⁵³ Concerning the first stage of the inquiry, Averroes clarifies that through an examination (*per considerationem*) of substantial generation it appears (*apparet*) that there is always a pre-existing substrate that remains during the intermediary phases of change. To illustrate his interpretation, he takes into account the case of the generation of animals. He states that it appears plainly (*perfecte apparet*) that in such generation there is always a pre-existing substrate, e.g. the sperm, which gradually loses the form of sperm and

⁴⁹ Aristotle, *Phys.* I 5, 188a30–31.

⁵⁰ Aristotle 1984b: 44.30.

⁵¹ *LC Physics* 28K (Bk. 1, comm. 44).

⁵² *Ibid.*, 37G (Bk. 1, comm. 62).

⁵³ *Ibid.*, 37L (Bk. 1, comm. 63).

acquires that of the animal. Once the necessity of a substrate has become evident through examination, Aristotle moves on to confirm it by induction.

In the case of this second statement, thus, even more clearly than in the first one, Averroes assumes that induction confirms something that can also be grasped through observation. Induction, in other words, corroborates what sense-perception also attests. Averroes points out that in this case, too, the required induction is a complete one in which all kinds of generation are analyzed, including artificial and natural generation:

And it becomes clear by induction that generation necessarily needs a substrate, not only in natural generation, but also in artificial generation . . . And all these beings clearly come to be from a substrate. And [Aristotle] verifies this by induction.⁵⁴

The demonstration of the existence of prime matter as a whole, and especially this last step, provides an example of the collaboration that, according to Averroes, Aristotle establishes between empirical observation and reasoning. Whether to offset some lack of evidence or to corroborate information already acquired by empirical observation, induction is the instrument that allows us to guarantee the alliance of sense-perception and reasoning.

To the essence or “substance” of prime matter Averroes suggests that Aristotle devotes the last two chapters of *Physics* I. In I 7 to its clarification, Aristotle states that matter is only “knowable by analogy” (ἐπιστητὴ κατ’ ἀναλογίαν).⁵⁵ Ishāq ibn Ḥunayn translates the expression “knowable by what is equivalent” (*tu’rafu bi-l-naẓīr/secundum comparisonem*).⁵⁶ When commenting on these lines, Averroes states that analogy is the only procedure allowing us to “conceive” prime matter, which is in a sense a borderline case:

And this nature, which underlies substance, cannot be conceived by itself, since it is not something in actuality that possesses a quiddity, but it can be conceived by analogy (*secundum comparisonem*), due to the obscurity of its nature. This is the reason why, when we want to clarify its substance, we say that it is to substance what bronze is to statue and wood to chair.⁵⁷

Since prime matter has no quiddity in actuality, it cannot be conceived by itself (*intelligi per se*), but we can grasp its substance by way of analogy.⁵⁸

⁵⁴ Ibid., 37L–M (Bk. I, comm. 63). ⁵⁵ Aristotle, *Physics* I 7, 191a7–8.

⁵⁶ Aristotle 1984b: 64:7–8. ⁵⁷ *LC Physics* 401 (Bk. I, comm. 69).

⁵⁸ On Averroes’ notion of prime matter, see Donati 1988 and Cerami 2015a: 382–94.

Averroes defines the nature of this analogy while commenting on Aristotle's statement that matter is to form what female is to male.⁵⁹ By using the same expression (*consideratio*), he claims that even if analogy is not a real scientific procedure, in the case of prime matter, as in all nonsensible beings, it is the only device allowing us to conceive its nature.⁶⁰ To this extent, analogy acquires an epistemological status that legitimates its use in natural science.

The Science of Heavens: The Celestial Body

I will conclude my analysis by briefly considering another significant illustration of Averroes' project of providing an a posteriori foundation of natural philosophy that excludes any appeal to dialectic in the acquisition of its proper scientific results.

Modern Aristotelian scholars lay much emphasis on the a priori foundation of Aristotle's arguments in *On the Heavens*. In particular, they claim that most of the statements leading to the general conclusions of books I and II are based not on empirical observations but either on geometrical assumptions or on generally accepted opinions. The arguments deployed in chapters I 2–4, concluding to the necessary existence of a fifth body besides the four sublunary elements (i.e. earth, water, air, and fire), are a case in point.

It has been stressed that in these chapters Aristotle supports the claim that there is an incorruptible celestial body, which is neither light nor heavy, by an appeal to geometrical assumptions, drawn from Pythagorean sources, as well as to long-standing traditions in religion and mythology, but not at all to perceptual phenomena. In an attempt to reveal the general method used here by Aristotle, R. Bolton has recently suggested that the arguments for the existence and character of the fifth body, like all the arguments labeled in Aristotle's text as merely "reasonable" (*eulogoi*), do not meet the genuine scientific standard of inquiry, which is grounded on indisputable empirical data, but follow a less rigorous and less reliable mode of procedure, based on generally accepted opinions that are neither contradicted nor verifiable by convincing empirical observation. Therefore, all these arguments pertain to a nonscientific, that is, dialectical, pattern of inquiry.⁶¹

In what follows, I will take into account Averroes' interpretation of these arguments and focus on their main assumptions. Concerning Averroes'

⁵⁹ Aristotle, *Phys.* I 9, 192a22–25.

⁶⁰ *LC Physics* 46F (Bk. I, comm. 81).

⁶¹ Bolton 2009.

interpretation of this part of Aristotle's doctrine, it has been advocated that his formulation reflects his project of making the study of heavens "a mathematical physics with virtually no physics."⁶² I would like to show that Averroes' formulation of these arguments suggests quite the opposite: his greatest effort is devoted to ruling out, as far as possible, any geometrical contribution to Aristotle's arguments and to showing that empirical data are the necessary and ultimate basis of his theory.

At least on this topic, Averroes considers that Aristotle's astronomical arguments are neither based on purely geometrical assumptions nor merely "reasonable." He interprets them as genuinely scientific arguments, more precisely as *signs*, that are grounded on indisputable empirical observation. This does not mean, according to Averroes, that dialectical arguments, based on lower forms of reasoning or on the opinions of predecessors, have no place at all in scientific treatises. In several places, Averroes makes clear that those kinds of arguments can be used in order to persuade or to reinforce the reader's conviction. Still, they cannot replace demonstrative arguments in the constitution of genuine scientific certitude.

Aristotle's arguments for the existence of a simple and incorruptible celestial body different from the four sublunary elements are meant to arrive at a double conclusion: there is a fifth body moving in a circle by nature; and this body is neither heavy nor light. These arguments are based on two primary contentions: the first one states that there are just three types of simple locomotion; the second one, that the fifth body moves neither downward nor upward.

Aristotle supports the first assumption in *On the Heavens* I 2, by appeal to the Pythagorean contention that perfection is achieved in "three." He argues that there cannot be more than three simple movements (i.e. away from the center, toward the center, and around the center), since there are no more than three dimensions and therefore three directions.⁶³ To the assumption that circular movement is simple, since the circle itself is simple, Aristotle adds the further contention that every simple movement must belong by nature to some simple body.⁶⁴ From these two contentions Aristotle infers that there must be a simple body, different from the four sublunary elements, that moves in circle by its very nature. Modern scholars, as we said, have stressed the nonphysical character of the first assumption. Concerning the assumption that every single movement must

⁶² See Hugonnard-Roche 2000: 386–95.

⁶³ Aristotle, *On the Heavens* I 2, 268b11–26.

⁶⁴ *Ibid.*, I 2, 268b27–269b17.

belong by nature to some actual simple body, it has also been remarked that it is not established by any appeal to sense-perception.

In the *LC On the Heavens* I 2, Averroes presents a completely different account of the entire argument, insisting from the very beginning on the "sensible" character of the movements in question. He states that the number of the simple "natural" movements is something evident to sense-perception, *manifestum sensui*, and that we "observe" that there are only three natural simple movements (*motus naturales sensibiles*): from the center of the universe and toward the periphery, from the periphery of the universe and toward the center, and around the center of the universe.⁶⁵ Accordingly, Averroes makes clear that the number of simple movements is not inferred from merely geometrical assumptions nor from generally accepted opinion, but supported by an empirical observation of the movements of our universe.

I will now briefly go over the second abovementioned assumption, according to which the fifth body, or as Averroes says, its parts, moves neither downward nor upward. This assumption is used in *On the Heavens* I 3 to demonstrate that the fifth body is neither heavy nor light. Averroes claims that the entire inquiry concerns the "nature" of the celestial body, whose existence has been previously established.⁶⁶ In so doing, he seems to suggest that in this case too, as in the case of prime matter, Aristotle has first established the existence of the celestial body, and then clarified its nature.

Averroes explains that this proposition is part of a more extensive argument, in which some premises are already established, and others are assumed, but not already proven. Among the latter there is the aforementioned one, which can be verified by a proof by reduction to the absurd. The argument runs as follows: we admit that the celestial body is heavy or light; we counterargue that, if that were the case, it should move upward or downward, since Aristotle has already established that bodies moving from the center and toward the center are heavy and light. In this case, however, the parts of the celestial body should move upward and downward too, for the same is true for the parts as for the whole: the parts have the same place as the whole. But, Averroes concludes, the parts of the celestial bodies move neither upward nor downward.

The entire argument, then, in Averroes' reconstruction, is based on two assumptions: (1) the parts and the whole move toward the same place and (2) the parts of the celestial bodies move neither upward nor downward.

⁶⁵ *LC On the Heavens* I.15–16 (Bk. I, comm. 6).

⁶⁶ *Ibid.*, I.30 (Bk. I, comm. 17).

Their validity, though, is not obvious, especially that of the second one, on which the entire *reductio* rests. The first assumption – Averroes states – is self-evident; the second is verified by empirical observation:

Since the demonstration stating that the spherical body is neither heavy nor light is based on two propositions, the first one stating that the spherical body moves neither from the center nor towards the center, the second stating that what moves this way is either heavy or light, and since these two propositions have already been established through reason, [Aristotle] wishes to show the minor one through the senses and reason. This proposition in its turn relies on two other propositions, one of which states that the place of the whole heavy or light body is also the place of its parts . . . The second proposition is accepted through the senses, and it states that no movement from the center or towards the center takes place in the parts of the spherical bodies and, therefore, that these parts are neither heavy nor light.⁶⁷

Averroes states clearly that the assumption that the parts of the celestial bodies move neither upward nor downward is accepted on the basis of empirical observation (*accepta a sensu*). The special nature of the celestial body, which is neither heavy nor light, is thus confirmed, as he says, by the senses *and* by reasoning. By reason, since we know that the parts and the whole, insofar as they have the same definition and form, have the same movement; by the senses, since no one, in the history of humanity, has ever observed a movement upward or downward in the parts of the celestial bodies.⁶⁸ One could retort that in relying on the testimonies of predecessors, the argument has a dialectical character. And yet this is not Averroes' point of view. For it is clear that the use of ancient sources is for him an appeal to empirical data previously recorded, and not merely an appeal to the opinion of recognized sages such as Pythagoras or Plato, or to generally accepted opinions.

Conclusions

Despite the difficulty of Averroes' reconstructions and despite concerns one might have as to their cogency and fidelity to Aristotle, the overall project of adapting the epistemological canon of the *Posterior Analytics* to natural philosophy is clearly what is at stake in his reading of the Aristotelian natural corpus. Averroes strives to show that natural philosophy is a genuine nonsubordinate science: it has a unique subject matter whose

⁶⁷ Ibid., I.35.10–25 (Bk. I, comm. 19).

⁶⁸ Cf. ibid., I.46–47 (Bk. I, comm. 22).

existence is self-evident and not demonstrated by another science; it establishes through a sign its own principles; and it demonstrates that per se accidents belong to their subject matter. On these three points, Averroes directly opposes Avicenna's doctrine and refutes his verticalistic system of knowledge, according to which natural philosophy is subordinated in a strict sense to metaphysics.

It is unquestionable that the rebuttal of Avicenna's doctrine stating the absolute superiority of metaphysics over natural philosophy constitutes a primary goal for Averroes. In a more general perspective, it is absolutely legitimate to conclude that Avicenna is definitely a major opponent in Averroes' philosophical project. However, an overall consideration of Averroes' commentaries shows that Avicenna is not the only target of his project.⁶⁹ The ultimate target is al-Ghazālī and Ash'arite occasionalism. If Averroes attacks Avicenna repeatedly and fiercely, it is because he judges that Avicenna's main tenets can leave the doors open to Ash'arite theory of knowledge stating that human knowledge depends directly on God's absolute power.⁷⁰

It is in this context that it becomes clear why the topic of the epistemological status of natural philosophy is so crucial for Averroes. It is not just a matter of Aristotelian exegesis, but a decisive question for anyone who wishes to defend the legitimacy of a philosophical study of nature. The sole possibility for neutralizing al-Ghazālī's criticisms and rejecting Ash'arite occasionalism is to affirm the a posteriori foundation of human knowledge and to grant to natural philosophy the status of certain and perfect science.

⁶⁹ For a survey of all criticisms against Avicenna in Averroes' commentaries on Aristotle's natural corpus (excluding *On the Soul* and biology), see Cerami forthcoming (a).

⁷⁰ I have set forth and supported this hypothesis in Cerami 2015a. I have suggested that, according to Averroes, Avicenna's main "ontological" mistake is to assimilate sensible dispositions to accidental properties and substantial forms to essential principles. This, according to Averroes, is also what brings Avicenna's doctrine closer to Ash'arite theology.

*Averroes on Divine Causation**

Peter Adamson

The formal, efficient and final causes are often one.

– Aristotle, *Physics* 198a24

Unity is a major theme of Aristotle’s *Metaphysics*, so it is appropriate that there should be a long-standing question as to the unity and coherence of the *Metaphysics* itself. Ever since its compilation in antiquity, views have differed as to whether its various books were intended to form a single work and, if so, in what order those books should be read.¹ Less notorious, but also appropriate to a book concerned with establishing the single cause that is the “one ruler” for all things, is the problem of the unity of book *Lambda*. Its status as a continuous piece of Aristotelian writing is of course far less contentious than that of the entire *Metaphysics*. But there is a problem of unity nonetheless. The first several chapters seem to be a resume of themes and theses from elsewhere in Aristotle, particularly the *Physics*. Only in chapter 6 do we come to the more celebrated topic of the immaterial, unmoved movers of the heavenly bodies, and ultimately the primary mover that Aristotle identifies with God.

In this sense, book *Lambda* already poses to its reader a problem that much concerned Averroes: what is the relation of physics to metaphysics? The reason for Averroes’ interest in the question is not far to seek. He emphatically rejected Avicenna’s strategy of proving the existence of God within metaphysics, insisting that the only way to establish this is by reasoning from the existence of eternal motion, which is a task for physics,

* My thanks to Matteo Di Giovanni and David Wirmer for helpful comments on a previous version of this chapter. I also benefited from a stimulating correspondence with David Twetten, who in addition to other pieces cited below, deals with some of the issues raised here in the following forthcoming article: “Whose Prime Mover Is More (un)Aristotelian, Broadie’s, Berti’s or Averroes’?”, in J.-B. Brenet and O. Lizzini (eds.), *La philosophie arabe à l’étude: Sens, limites et défis d’une discipline moderne*.

¹ For an up-to-date discussion and new discoveries, see Di Giovanni and Primavesi 2016. For Averroes’ views, see Arnzen 2010.

not metaphysics.² Given his stringent methodological distinction between discussions appropriate to physics and those appropriate to metaphysics, it is something of an embarrassment for Averroes to find “physical” material at prominent places in the *Metaphysics*. Already in his commentary on book *Alpha Elatton*, which for the Arabic tradition is the beginning of the whole *Metaphysics*, Averroes goes out of his way to label certain passages as mere “reminders” of what was already achieved in the *Physics*.³ Confronted with Aristotle’s argument against the possibility of infinite causal regresses at 994a11–19, he says:

All this is shown in *Physics* book VIII, and what he says here is only by way of reminder. But the general inquiry into all causes insofar as they are causes does belong to this science. So it is possible here to engage in a general inquiry into causes, even if what is shown belongs partially to physics. Even if he does here engage in demonstrations from physics, he extends them more generally than physics had done. For the more general the demonstration, the more appropriate it is for this science. Thus, in this science Aristotle pursues demonstrations that are more general and more fitting to the purpose of this science. So he extends those physical arguments more generally here than in physics. This is why he recalls and brings back those demonstrations in this science, just as he does in book *Lambda*.⁴

As the last remark anticipates, Averroes will use the same strategy in his commentary on *Lambda*.

To some extent, this is a point of agreement between Averroes and the man whom he considers to be his most serious predecessor as an Aristotelian commentator: Alexander of Aphrodisias. In his commentary on *Lambda*, which is lost but for the quotations preserved by Averroes himself, Alexander already suggests that some of the material in this book does no more than restate points established in the *Physics*.⁵ Yet Averroes is not happy with the way Alexander distinguishes the business of physics from the business of metaphysics. As we shall see, he objects to Alexander’s suggestion that the study of immaterial substances is uniquely appropriate to metaphysics, given that the existence of these substances was already proven in physics. This gives rise to a further question about *Lambda*: if Aristotle’s philosophical theology was already supplied in *Physics* VIII, what is left to achieve here? In brief, Averroes’ solution is that *Lambda*

² Bertolacci 2007. ³ On the commentary on *Elatton*, see also Adamson 2010.

⁴ *LC Metaphysics* 22.

⁵ For instance at 1442.13–15 = Fragment 8b in Alexander of Aphrodisias 1885. Averroes is already applying this strategy to *Lambda* in his *Epitome*, e.g. at *Ep. Metaphysics* 126; English at Averroes 2010: 139.

considers the immaterial substances from another point of view than was taken in physics. In order to do so, it needs to presuppose the findings of physics, which is why so much of *Lambda* is little more than a resume of those findings, albeit that the resume adopts a more general method that is appropriate to metaphysics.

What exactly is the difference between the two points of view? It lies above all in the application of Aristotle's familiar distinction between the four modes of causation. Given that the unmoved movers are immaterial, it is evident that they are not material causes.⁶ Averroes' view is that the movers, including God, exercise *all three* remaining types of causation: they are efficient, final, and formal causes. He will have been pushed toward this conclusion by book *Alpha Elatton*, which occasioned the comment just quoted. In chapter 2 of that book, Aristotle establishes the impossibility of a regress in all four kinds of causation. It would be awkward, to say the least, to admit that there are distinct first efficient, formal, and final causes. Much better would be to show that primacy in all three sorts of causality coincides in the divine movers. The question is how to show this, and in which science. Averroes' answer is subtle: it is the role of physics to establish the movers as efficient causes, leaving it to metaphysics to show that they exert final and formal causation. That Averroes thinks this should be uncontentious, because he says as much in *LC Metaphysics*. Yet some interpreters have suspected that when Averroes calls God an efficient cause, this is no more than a *façon de parler*, or at best a subsidiary observation grounded in the formal and final causality exercised by God.⁷ On the face of it, though, that would be a disaster for Averroes' project. For it is only through physics that we establish the existence of these movers, and physics only establishes them as efficient movers.

The whole question is worth deeper investigation. The mode of divine causation is still debated among contemporary commentators on Aristotle,

⁶ At *Incoherence of the Incoherence* 386, Averroes says, "[I]f [the uncaused cause] is common in respect of name (*ism*), there is nothing to prevent there existing more than one, and this is the situation of the four primary causes (*asbāb*), namely first agent, ultimate form, ultimate end, and ultimate matter." His point here, I take it (*pace* Van Den Burgh's note *ad loc* in Averroes 1954b) is not that God can also be called "ultimate matter" but that there are two things to which the expression "first cause" applies in common, namely God (efficient, formal, and final first cause) and prime matter (material first cause).

⁷ Kogan 1985: 241: "the mode of causation Averroes has in mind here is ultimately formal and final. While he never fails to add that God is likewise a genuine agent, his concept of efficient causation seems plainly derivative." More recently, Normore 2015: 193: "Averroes accepts that the First moves the universe as a final and not an efficient cause," and Twetten 2015: 404 says that, "by being the formal and final cause of the *properly* efficient celestial movers, God is indirectly the cause of (nearly) all things."

so one would like to know exactly what “the Commentator” thought about it.⁸ It is also a central issue for our understanding of Averroes. For on this question turns not only Averroes’ exegesis of *Lambda* but his understanding of the respective contributions of physics and metaphysics to philosophical theology. In what follows, I will first provide some quick reminders of my own concerning views on divine causation prior to Averroes. Then, I will look at texts that prepare the way for the discussion in *LC Metaphysics*, focusing especially on *Ep. Metaphysics* and the *Incoherence of the Incoherence*.⁹ Finally, I will consider Averroes’ criticism of Alexander in more detail, before moving on to ask how, according to the commentary on *Lambda*, God is an efficient, a formal, and a final cause.

The Background: From Ammonius to Avicenna

Few commentators on Aristotle subsequent to Alexander have failed to admire him as an exegete. Equally, few have refrained from criticizing him on occasion. Our topic is a case in point. More than half a millennium before Averroes, the head of the Alexandrian philosophical school, Ammonius, was complaining about Alexander’s claim that God is a productive or efficient (ποιητικός) cause of the *motion* of the heavens, but that the heavens in themselves need no efficient cause because they are ungenerated. We know this thanks to Simplicius, who sketches the arguments given by Ammonius against Alexander’s opinion.¹⁰ According to this testimony, Ammonius cited a wide range of passages from Aristotle, without alluding explicitly to *Lambda*. Still, it is clear that he had this book in mind, since he bases himself in part on the idea that Aristotle’s God is an intellect. Another of his proof texts is from earlier in the *Metaphysics* (I 4, 984b15–20), where Aristotle commends Anaxagoras for making intellect the cause of change in the universe.

But this only shows that God is an efficient cause of motion, not of the universe itself. So Ammonius argues that “what is moved by something else must also get its existence from somewhere, if being is superior to moving. And if, according to Aristotle, the power of any finite body is itself finite, clearly whether it be a power of moving or a power that produces

⁸ See e.g. Steel 1987 and Berti 2000.

⁹ I will refer only occasionally to other works such as the commentaries on the *Physics* and *On the Substance of the Sphere* (*De substantia orbis*), because my main interest here is Averroes’ exegesis of the *Metaphysics*, and because these texts have been well explored in other research, especially Twetten 1995 and 2007.

¹⁰ Simplicius in *Phys* 1361–63. I quote from the translation at Sorabji 2005: 8(c).

being, then, just as it gets its eternal *motion* from the unmoved cause, so it must receive its eternal *being* as a body from the non-bodily cause.” The argument here seems to go as follows:

1. Eternal motion in a finite body requires an external productive cause.
2. Being is superior to motion.
3. Superior effects stand in need of a cause at least as much as inferior effects.

Conclusion: Eternal being in a finite body requires an external productive cause.

If this is right, then the unstated premise 3 is doing most of the work. Like premise 2, it has a rather Neoplatonic flavor, which may lessen the persuasiveness of Ammonius’ argument as an interpretation of Aristotle.

For our purposes, though, his general strategy is more important than the details of his argument. Ammonius thinks that we establish an ultimate productive or efficient cause of *motion* for the universe and infer that this cause is also a productive or efficient cause of *being*. In what follows, I will call this the “Ammonian Strategy.” It can be contrasted to the position Ammonius ascribes to Alexander, according to which God can be shown to be a productive cause only of motion, and not of being. We should also note that the Ammonian Strategy looks to be a promising way to answer the question confronted by Averroes: how do we distinguish the tasks of physics and metaphysics? A proponent of the strategy can say that physics grasps God as the ultimate productive cause of motion, but it is left to metaphysics to grasp Him as the productive cause of being.

Moving on now to the Arabic tradition, we already find al-Kindī taking up this question of whether God is an efficient or “agent (*fā’il*)” cause. In a very short piece found in the Istanbul manuscript that provides most of our evidence for his philosophical output, he contends that God is in fact the only “true” agent, whereas other causes are only “metaphorically” agents.¹¹ This does not indicate that al-Kindī is embracing some sort of occasionalism. Rather, he uses “truly F” to mean “F without being not-F,” and “metaphorically F” to mean “F but also not-F.” For the same reason, God is called the “true One” in his *On First Philosophy*: He is one and in no respect multiple. In the context of this brief discussion, al-Kindī does not broach the question of whether God is an agent cause of motion, being, or something else. Elsewhere though, al-Kindī affirms that God is

¹¹ *On the True Agent*, in al-Kindī 2012: 73–75.

indeed a cause of heavenly motion, which is the instrument of divine providence. In arguing for this, he calls God the “remote agent cause,” whereas the heavens are the proximate agent cause for things that happen in the sublunary realm.¹² Al-Kindī thinks that God is a cause of being, too. *On First Philosophy* presents God primarily as a cause of oneness, but this implies that He causes being, given that causing the unity of something implies causing it to be: “the emanation of unity from the true, first One is the bringing-to-be of every sensible thing.”¹³ There is, however, no text that would tell us how al-Kindī would have integrated the account of God as a cause of unity, and thus of being, with the account of Him as a cause of motion. He does not pass judgment on the Ammonian Strategy.

For that, we need to wait until the *Harmony of the Two Philosophers*,¹⁴ a work ascribed to al-Fārābī. Hard on the heels of a well-known appeal to the *Theology of Aristotle* (in fact an Arabic reworking of Plotinus) to show the compatibility of Platonist and Aristotelian views on the Creator, the author cites Ammonius’ “free-standing treatise” devoted to the statements of the two authorities on this very topic. Unfortunately, he then adds that there is no need to discuss the treatise in detail because of its notoriety (*bi-shuhratihā*). However, the *Harmony* has just alluded specifically to *Metaphysics* book *Lambda*, where Aristotle “ascended from necessary premises to prove the oneness (*waḥdāniyya*) of the Creator. . . then he goes back down, exhaustively proving the soundness of what was assumed in those premises.”¹⁵ Unfortunately no more detail is given here as to the nature of the premises, but given the following allusion to Ammonius one could plausibly take the *Harmony* to be suggesting that these are premises taken from physics. This science would offer to metaphysics the premise of eternal motion, a premise invoked in *Lambda* as a basis for a philosophical theology.¹⁶

¹² *On the Proximate Agent Cause* §III.5, in al-Kindī 2012. This work (at §I.3) also repeats the idea found in *On the True Agent* that God is the only agent cause that is uncaused by a further agent cause. It seems likely that in both contexts, al-Kindī has in mind Aristotle’s remark in chapter 7 of *Lambda* (1072a24–5) that what is both moving and moved is “in the middle,” but there is another principle that only moves. If so, then he is thinking of God’s agency as the causation of motion.

¹³ *On First Philosophy* §XX.5, in al-Kindī 2012. For more on al-Kindī’s philosophical theology, see chapter 3 of Adamson 2007.

¹⁴ Al-Fārābī 2008: 66; English at al-Fārābī 2001: 157. Its authenticity is challenged in Rashed 2009; for a rejoinder, see Genequand 2012.

¹⁵ Al-Fārābī 2008: 65.

¹⁶ This is broadly consonant with al-Fārābī’s rather sparse remarks on the transition from physics to metaphysics in other works, notably in the *Attainment of Happiness*, at al-Fārābī 1926: 12, where he says simply that the inquiry into the heavens leads one to affirm incorporeal principles more perfect than natural things (he does not say whether these are principles of motion or being). This in turn means taking up the science of metaphysics.

Avicenna, by contrast, takes an emphatic line against the Ammonian Strategy.¹⁷ Having himself discovered a properly metaphysical proof for God's existence, which entails that God is an agent cause for the existence of other things, Avicenna can consider the physical route through motion as unnecessary.¹⁸ But he thinks it is worse than unnecessary. It is in fact inappropriate to God's mode of causation:

It is wrong to proceed to the First Truth by means of motion, and insofar as He is a principle for motion, it being unsuitable to establish a principle for essences (*dhawāt*) on this basis. For some have wanted to take from [Aristotle's] affirmations no more than that [God] is a mover, not that He is a principle for the existent. But it is extraordinary that motion should be the way to affirm a True One that is the principle for all existence! And we say: from their making the First Principle a principle for the motion of the celestial sphere, it does not follow that they make Him a principle for the *substance* of the sphere.¹⁹

Like Ammonius, Avicenna here complains about the sort of interpretation associated with Alexander, according to which God causes motion but not being. But the method adopted by Ammonius fares no better, because one can simply not infer God's causation of being from his causation of motion.

Before the Long Commentary

Averroes' most sophisticated and detailed discussion of these issues is to be found in *LC Metaphysics*, and it will occupy most of our attention in what follows. But it is worth glancing first at what he has to say in two other works commonly taken to be earlier, namely *Ep. Metaphysics*²⁰ and the *Incoherence of the Incoherence*.²¹ Here is a relevant passage from the former:

[The celestial movers] not only move the celestial bodies but also provide them with their forms through which they are what they are. For when we deny the existence of [the movers], there would be no forms of the rotating

¹⁷ Avicenna may be reacting against other Neoplatonizing works that invoke movement as a basis for philosophical theology, for instance the anonymous *Book of Motion* (*Kitāb al-Haraka*) and the *Questions* of the shadowy al-Isfīzārī. See E. Wakelnig's discussion in Rudolph 2012: 172–73. Another possibility would be that this is a characteristic broadside against the Baghdad Aristotelians. It has recently been suggested (Janos 2015: 142) that the founder of that group, Abū Bishr Mattā, reasoned to God through physics as an efficient cause of motion.

¹⁸ For the proof, see Marmura 1980; Davidson 1987; Mayer 2001; McGinnis 2010: chapter 6; Lizzini 2012: chapter 2; and Adamson 2013a.

¹⁹ Avicenna 2014: §5. ²⁰ Cited in Arnzen's translation from Averroes 2010, with modifications.

²¹ Cited in Van Den Burgh's translation from Averroes 1954b, with modifications.

bodies, just as there would be no utmost perfection for us, when we deny the existence of the intellect in actuality. Consequently, these [movers] are, from this point of view, in a certain way acting on the [celestial bodies] (*fā'ila labā*), since it is the agent cause (*al-fā'il*) that provides the substance (*jawhar*) of a thing . . . Meanwhile they are, from another point of view, forms for them, for the forms of the celestial bodies are nothing else than that which the [celestial bodies] think of these [movers]. And they are also final causes for them because the [celestial bodies] are moved by them by way of desire.²²

In this highly compressed passage, we see Averroes apparently adopting the Ammonian Strategy. Because the celestial intelligences provide the motion of the spheres, they provide the spheres' forms, and hence cause "substance" as well as motion. The reason I add the caveat "apparently" is that Averroes' remarks are hedged about with qualifications ("from this point of view," "in a certain way") and involve even more argumentative leaps than what we saw in Simplicius' report of Ammonius. The rationale given for saying that the intelligences are agent causes for the substance of the spheres is that without them, the spheres could not be "perfect." The inference turns on an allusion to psychology, and in particular the idea that actual intellect is agent as well as formal and final cause for the soul.²³ As for the further inference to the formal and final causality of the intelligences, it is tempting to take "from another point of view (*min jiha ukhrā*)" to mean "from the point of view of the metaphysician." That suspicion tends to be confirmed by *LC Metaphysics*. But if so, then we will want to know what makes this inference distinctively metaphysical.²⁴ More explicit is the assertion that we infer formal and final causality from the premise that the intelligences cause motion. But there is an obvious worry here. Averroes says that the intelligences cause motion as forms and as ends or final causes. Doesn't this suggest that they are not agents or efficient causes after all?

²² *Ep. Metaphysics* 140–41.

²³ As Wirmer 2014: 138–45 has argued, Ibn Bājja laid great emphasis on psychology as the highest natural science and in a sense the highest science full stop, since it is through psychology that we grasp the nature of the Active Intellect and celestial movers. Averroes may be indebted to Ibn Bājja on this score (and also al-Fārābī, who likewise saw psychology as a kind of "bridging" science between physics and metaphysics). For Averroes it seems, however, less true that, as Wirmer puts it, "psychology may supplant metaphysics as the science of the first principle, because it is only through it that we may know the existence of pure intellect as the nature of transcendent principles" (144, my trans. from the German).

²⁴ Though Averroes has less to say about disciplinary boundaries in the *Ep. Metaphysics* than in *LC Metaphysics*, he has earlier in *Ep. Metaphysics* (128–31) contrasted two ways of demonstrating the immateriality of the celestial movers, one of which is physical, the other metaphysical.

This brings us to an accusation leveled at “the philosophers” in al-Ghazālī’s *Incoherence of the Philosophers*.²⁵ The third section of this work questions whether the philosophers can in fact apply the word *fā’il* to God. Here it is important to remember that the word can mean “agent,” in the nontechnical sense of someone who does something, and is also used in Aristotelian contexts to mean “efficient cause.” Al-Ghazālī argues that a genuine *fā’il* must really be an agent, and one who acts freely rather than automatically. But on Avicenna’s account, God does act automatically, hence He is no agent. Now, this polemic is not directly relevant to the issues we have been looking at in this chapter. For al-Ghazālī is asking us to focus on freely exercised *agency* as opposed to efficient causality in general and to reserve the term *fā’il* for this sort of agency. He says, for instance, that when fire warms something, it does not deserve to be called *fā’il*, because it automatically gives rise to warmth. Yet if God causes motion or being in precisely the same way, He would count as an efficient cause in the broader sense.

Still, al-Ghazālī’s criticism provokes Averroes to make remarks that are indeed relevant for our concerns. He notes that the Platonists leveled this same accusation at Aristotle, since he did not have God creating but only moving the universe. But they were wrong to do so:

The celestial bodies subsist through their movement, and He who bestows this movement is in reality the agent of the movement and, since the existence of the celestial bodies attains its perfection only through the motion, the giver of the motion is the agent (*fā’il*) of the celestial bodies. Further, they prove that He is the giver of the unity through which the world becomes one, and the giver of the unity which is the condition of the existence of the composite.²⁶

This is remarkably close to the passage just considered from *Ep. Metaphysics*. Averroes insists on applying the word *fā’il* to the cause of celestial motion, on the basis that the cause of motion is also responsible for the bodies’ attainment of form (here again “perfection”). This observation would in fact apply to all the celestial movers, but what Averroes adds next has to do with God alone. He is somehow the source of unity for the universe as a whole, so for this reason too we must acknowledge that God is a cause of being.²⁷ Indeed, in the *Incoherence of the Incoherence* Averroes is much more emphatic than in *Ep. Metaphysics* that God is indeed a cause of being. He says that God is neither a voluntary agent, as al-Ghazālī

²⁵ Al-Ghazālī 1997. ²⁶ *Incoherence of the Incoherence* 172.

²⁷ See also *ibid.*, 152 and 180–81 for God as the cause of the coherence of the universe’s parts.

would want, nor an involuntary efficient cause like fire. He is rather a *sui generis* agent who “draws forth the universe from non-existence to existence” (151). The upshot is that God is “analogous to” (*tashabbuh*, 175–76) all three kinds of cause in the created world and serves to terminate any possible regress of efficient, formal, and final causes.²⁸

The Contribution of Physics

We are now ready to turn to the treatment of book *Lambda* in *LC Metaphysics*, which is invaluable not only in itself but also because, as already noted, it preserves otherwise unknown remarks by Alexander on the Aristotelian text. As a general rule, Averroes admires and depends on Alexander, and he usually cites him with approval. The exceptions to this rule usually come when Alexander says something that reminds Averroes of Avicenna. One such case is Alexander’s observation that:

The demonstration of any principles of existing things whatsoever is the task of the first philosopher, although these are used by the natural philosopher, insofar as he does not *prove* them but merely posits them. For the unmoved substance is a principle, and a cause, for natural things.²⁹

This sounds far too much for comfort like Avicenna’s claim that proving the existence of God is a task for metaphysics. So Averroes complains:

How can he [sc. Alexander] say that the practitioner of natural philosophy only posits [the principle of eternal substance], when it is proven only in natural philosophy?³⁰

The idea that *only* physics proves God is of course part of Averroes’ anti-Avicennan polemic and is a constant refrain in the commentary on *Lambda* (e.g. at 1423, 1499, and 1653). After the passage just cited, he goes on (1426) to say that it may even have been Alexander’s commentary that led Avicenna into error.³¹ On the other hand, that error is rather a crass one from Averroes’ point of view, and he would prefer not to admit that a commentator of Alexander’s stature committed it. So he tries to find a way of taking Alexander’s point to be a valid one:

[Aristotle] does posit what was shown about this [sc. the eternal principles of substance] in natural philosophy, but he devotes to it an inquiry that is

²⁸ See *ibid.*, 267, where Averroes is clearly thinking of *Alpha Elatton*.

²⁹ Alexander, fr.4a in *LC Metaphysics* 1420. ³⁰ *LC Metaphysics* 1422.

³¹ For a similar complaint, see Averroes 1986: 105.

appropriate to this science [sc. metaphysics], for instance its being substance, primary form, and end . . . Natural philosophy proves the existence [of the principles] insofar as they are principles of the moved substance, but the practitioner of this science inquires into them insofar as they are principles of substance insofar as it is substance, not insofar as it is moved substance.³²

If this is what Alexander meant by saying that it is only the metaphysician who investigates the principles, then his statement is acceptable.

This leaves us with the question of what metaphysics adds to our understanding of the principles – what does it tell us about the celestial movers as principles of substance as such? We do not have to wait long for an answer, since Averroes resumes his critique and irenic reinterpretation of Alexander in his comments on the next lemma. He again quotes Alexander to the effect that it is reserved to first philosophy to study immaterial substance, so that the natural philosopher must receive premises about this from the metaphysician (Fr.6). Averroes says that this opinion is false, if taken “with its apparent meaning (*‘alā ḡābirihī*).” But there is a sense in which it is true:

It is the natural philosopher who supplies the material and moving causes of the moved substance. He cannot deal with the formal and final causes, because it is the practitioner of this science [sc. metaphysics] who shows which cause for the moved substance has this attribute (*ṣifa*), that is, being formal and final. For he knows that the moving principle whose existence has been shown in natural philosophy is the principle for sensible substance by way of form and end. So it is in this way that the practitioner of this science inquires into the elements [i.e. principles] of sensible substance: these are the elements which make being *qua* being exist. Thus, he shows in this science that the immaterial existent, which was shown to move sensible substance, is a substance prior to sensible substance, and that it is its principle insofar as it is form and end. Accordingly, we must understand that the practitioner of this science investigates the principles of natural substance, that is, [investigates] the primary form and end. As for the moving and material cause, it is the practitioner of natural philosophy who investigates this. In this science [sc. metaphysics], he [sc. Aristotle] makes the existence of these two causes a principle for his investigation into the two remaining causes.³³

And Averroes goes on to say (1435) that Alexander can be understood as meaning to say precisely this: the natural philosopher supplies the metaphysician with premises concerning primary *efficient* causality, and the

³² *LC Metaphysics* 1425–26.

³³ *Ibid.*, 1433–34.

metaphysician returns the favor with premises concerning primary *formal* and *final* causality.

If we put this together with Averroes' remarks on the previous lemma, we get the following neat picture. Physics inquires into substance *as moved* and establishes efficient causes as the principles of substance so conceived. Metaphysics inquires into substance *as such* and establishes that those very same principles are also formal and final causes of substance. If this is right, then there are far-reaching implications. First, Averroes must be rejecting the Ammonian Strategy: when we consider the movers, including God, as efficient causes, we are only thinking of them as principles of motion, not of being or substance. Second, and conversely, the inquiry into the movers as formal and final causes should not restrict itself to explaining motion. Rather, these two sorts of causation must be relevant to the moved substance's status as a substance. In the rest of the chapter, I will test these implications by considering each type of causation in turn.

Efficient Causality

Taking efficient causation first, we should ask ourselves whether it is really plausible to think that the metaphysician has *nothing* distinctive to offer about the movers' efficient causation. Recall Averroes' twofold solution to the problem of why there is so much "physical" material in this metaphysical context. As we saw, in his commentary on *Alpha Elatton*, he says that Aristotle, on the one hand, seeks to remind the reader of premises that are needed here. On the other hand, "even if [Aristotle] does here engage in demonstrations from physics, he extends them more generally than physics had done." If we apply this twofold solution to the present case, then it is easy to see that *Lambda* does indeed remind us of a premise from physics, namely that there is an immaterial efficient cause of celestial motion. But does Averroes also think that *Lambda* studies the movers as efficient causes from a distinctively metaphysical point of view that is extended to be "more general"? Perhaps even, as he said in *Ep. Metaphysics* and the *Incoherence of the Incoherence*, that the movers are efficient causes for the *substance* of the spheres? If so, then he would be following the Ammonian Strategy after all.

An illuminating passage for these questions comes in the surprising context of a discussion about spontaneous generation.³⁴ Averroes tells us

³⁴ For the issue in general, see Kruk 1990 and Hasse 2007, and regarding Averroes, see Cerami 2015a: 209–13 and 622–66.

that Themistius cited this phenomenon as a possible proof for Platonic Forms (1492–4). After all, Aristotle himself is committed to what could be called the “synonymy rule”: anything F is caused by something that itself actually has the form F. For instance, fire is actually hot, and so can make other things hot. In the case of a spontaneously generated animal, like a worm, there is no worm progenitor involved, so the only candidate synonymous cause would be a separate Form of Worm. Averroes is keen to show the flaw in Themistius’ reasoning, and not only because he rejects the need for Platonic Forms. It is also because he yet again sees a resemblance to the views of Avicenna, who invoked a “giver of forms” to explain the generation of organisms, whether spontaneously or not (1498). In response to Themistius, Averroes first explains the criteria that need to be satisfied if we are to talk of efficient causation:

The teaching we have taken from Aristotle is that the agent (*al-fāʿil*) makes (*yafʿalu*) the compound from matter and form, and does so by moving the form and changing it, so that the form that was in it potentially is brought into actuality . . . The agent, on Aristotle’s view, is not in fact what joins two things, but simply brings the potential into actuality.³⁵

On this basis, he goes on to relax the synonymy rule, without denying it entirely. The meaning of the principle “is not that the synonym, through its own essence and form, makes the form of something synonymous to it; rather, it means only that it brings the form of something synonymous to it from potentiality into actuality” (1499–500).³⁶

His point is that there is no transfer of a shared nature from cause to effect, as in the giver of forms. Rather, the cause simply brings out what was already potentially present. This means that the synonymy between cause and effect can be partial. A cause can give rise to life without itself having a soul, and you can produce fire with motion instead of another fire.³⁷ Nonetheless: “whatever brings something from potentiality into actuality must have in it in *some* way this feature (*māʾnā*) that is made actual, without [necessarily] being the same (*huwa huwa*) in all respects” (1500). Averroes does not here spell out the implications for the celestial movers, but they are clear enough. First, the movers do count as agents,

³⁵ *LC Metaphysics* 1499.

³⁶ In support of Averroes, we may note that at *Metaphysics* 1071a16–17, Aristotle explicitly admits causes that are “not similar in form, yet movers,” for instance the sun for the generation of humans.

³⁷ Averroes presumably has in mind the use of friction to light fire, but his point would also help us to understand how the sun, despite being neither hot nor cold in the Aristotelian theory, causes heat in the sublunary region.

because they bring about the actualization of a potentiality.³⁸ This is no *façon de parler*: the movers satisfy the official criteria for efficient causation. Second, by the synonymy rule the movers must share something with their effect, but they do not have to have exactly the characteristic they are causing. This is a good thing, since they are unmoving yet are causing motion.

What then do they share? This turns out to be another question on which Averroes cites, and criticizes, Alexander (in this case, without any accompanying allusion to Avicenna). He quotes Alexander as holding that God is an exception to the synonymy rule:

There is a principle that is outside the things that are moved, which is common to all moved things. Given that this principle is common, insofar as it is common and remote, it need not be synonymous. The first mover, as has been shown, moves only as a perfection, and what is like this need not be synonymous.³⁹

To this Averroes adds, “the truth is that the first principle need not have synonymy in the sense that applies to the specific principle (*mabda’ khāṣṣ*), although it does have synonymy in another, general way” (1529–30). Though one might consider this sentence to be a continuation of the material from Alexander, it would seem rather to be an intervention by Averroes. He contradicts his fellow commentator, as indicated by the words “the truth is that (*al-ḥaqq anna*),” insisting that there will be some degree of synonymy between mover and moved. It is no surprise that Averroes should disagree with Alexander, since Alexander’s reason for denying the application of the synonymy principle in this case is that the mover moves only as a final cause or “perfection (*istikmāl*),” and Averroes disagrees with this too. As we have just seen, he insists that the mover is an efficient cause.

Of course, that does not take us much further. It tells us only that what the mover shares with the moved may not be precisely the same form, but something more “general.” This we already knew from Averroes’ response to Themistius. But remember that we have seen this talk of “generality” before: metaphysics studies the causes also studied in physics, but “in a more general way.” Maximal generality is characteristic of metaphysics, as was already observed by al-Fārābī in his *Aims of the Philosopher*: whereas all other sciences are particular and study only certain sorts of being

³⁸ For this point, see also Cerami 2015a: 660.

³⁹ Alexander, fr.20a in *LC Metaphysics* 1529.

(*mawjūdāt*), metaphysics is a universal science and studies what is common to all beings.⁴⁰ I suggest, therefore, that Averroes believes synonymy to hold between the movers and the moved things in virtue of the fact that they are all *beings*. This synonymy is “general,” befitting the most general science, because everything that there is is a being. And of course, it fits the conception of metaphysics as the science of being qua being.

But we need to be careful here. Averroes has not repeated his claim from other works, that God is an agent cause of the substance of the heavenly spheres or of the substance of the universe as a whole. From what we have seen it seems rather that God is an agent cause only of motion, in the sense that he actualizes potential motion. Thus Averroes stays true to the division of labor he identifies for physics and metaphysics: agent causation is established in natural philosophy and concerns the production of motion. He does not (as in earlier works) pursue the Ammonian Strategy of inferring efficient causation of being from efficient cause of motion. But this does not rule out that Averroes’ God is somehow a cause of being.⁴¹ To the contrary, He is the *formal* and *final* cause of the being of other things. This is why it is appropriate that metaphysics, and not physics, should reveal the formal and final aspects of divine causation.

But before turning from agency to these other types of causation, I should clarify what may seem to be a point of disagreement between the reading I have offered and that given by H. A. Davidson. For he speaks of the complete absence of efficient causation in the incorporeal realm,⁴² whereas I have emphasized the crucial role of efficient causation in Averroes’ theory of the incorporeal movers. Davidson depends especially on the following passage:

There is no potentiality there, and therefore no agent there. There is only intellect and intelligible, that which perfects and that which is perfected by it, in the way that the arts perfect one another. For some of them take their principles from others, and with regard to that which is given to them from these [others], they ultimately take all their principles from the universal art

⁴⁰ See the translation in Gutas 2014: 273. Another example of the “generality” of metaphysics arises in the first part of *Lambda*, which for Averroes looks at the triplet form–privation–matter already discovered in physics, but from a metaphysical perspective, for instance by pointing to the substantiality of the principles of sensible substance (*LC Metaphysics* 1425). On the “generality” of metaphysics for Averroes, see also Wirmer 2013: 343.

⁴¹ Compare Wirmer 2013: 347, 353, who argues that God is not the efficient cause of any effect in particular and thus only a “quasi” efficient cause. This may be right as concerns being, but it seems from *LC Metaphysics* that Averroes’ God does exercise properly efficient causation with respect to motion, by causing the outermost celestial sphere to rotate.

⁴² Davidson 1992: 227–31.

that encompasses them. This is the reason for what we see: that the science properly concerned with the First (glorious is He!) is something included in first philosophy, whereas the science properly concerned with those principles that are below Him resembles the partial sciences, which are below first philosophy.⁴³

It is important to see that the opening of this passage does not deny that God or the other celestial movers *exercise* efficient causation. Rather, Averroes is saying that they do not *have* efficient causes: they are unmoved and do not need to be actualized. By contrast the celestial spheres are moved, and the movers are thus efficient causes for them. I believe this reading is compatible with Davidson's remarks.⁴⁴ His point is to contrast Averroes with al-Fārābī or Avicenna, who would indeed have seen God as an efficient cause *for the other intellects*, and I agree that Averroes denies this in *LC Metaphysics*. The passage is of course also important for our broader question of the distinctively metaphysical character of the discussion in *Lambda*. Again, we see Averroes emphasizing the *generality* of God's causation: He ultimately provides the principles for all the other movers, the way that the highest art provides principles for all lower arts. This too is something we will understand better once we have looked at the two other sorts of causality exercised by God and the celestial intellects.

Formal and Final Causation

Though Averroes consistently maintains that God and the other movers exert efficient causality, he freely admits that they do so only as objects of desire (e.g. at 1592). But there is no tension implied here:

This mover is an intellect, and is a mover both in the respect (*min jiha*) that it is an agent for the motion, and in the respect that it is an end (*ghāya*) of the motion. For this is distinguished and numerically distinct only for us, that is to say, that which moves us in place in the respect that it is an agent and that which moves us insofar as it is an end. This is simply a result of the fact that it exists in two ways, on the one hand in the soul, and on the other hand outside the soul.⁴⁵

To illustrate the point, Averroes gives the well-known "analogy of the baths": when I am going to the baths, the idea of the baths in my mind is

⁴³ *LC Metaphysics* 1652.

⁴⁴ For instance, he writes that "the category of efficient causation cannot be used to explain the existence of the incorporeal realm" (229).

⁴⁵ *LC Metaphysics* 1594.

an efficient cause of my motion, but the actual, externally existing baths are the final cause of the same motion. In the heavens, though, both types of causation coincide.⁴⁶

In the same way, one must understand concerning the movers of the celestial bodies that they are moving in both ways, without being numerically distinct. So, insofar as these intelligibles are forms for them [sc. the bodies] they move as an agent, and insofar as they are ends for them they move them in respect of desire.⁴⁷

In fact, we can say that all three types of causation coincide here: by being forms and ends for the spheres the movers actualize potential circular motion, which is why they count as efficient causes.

One might worry that Averroes' reasoning too is circular. We learned from physics that the movers are efficient causes. Now, in metaphysics, we seem to be learning *again* that they are efficient causes, thanks to our new discovery that they are final and formal causes.⁴⁸ But the circularity is merely apparent. Remember that Averroes applies a very broad notion of efficient causation when he ascribes this sort of causation to the movers: anything that actualizes potentiality counts as an agent.⁴⁹ So we are not learning here that the movers are efficient causes. Rather, we are learning in more detail how the movers exercise this very causality, an inquiry that, Averroes insists, can be undertaken only once one has already established them as efficient causes in physics.⁵⁰ As the analogy of the baths makes clear, physics and metaphysics are approaching one and the same cause from two different perspectives (hence the repeated use of the expression *min jiha*). As he says elsewhere, the three types of cause are three

⁴⁶ The same point is made in the *De substantia orbis*, at Averroes 1986: 81.

⁴⁷ *LC Metaphysics* 1594–95.

⁴⁸ Cf. Kogan 1985: 242: “he who gives the existents their end gives them their form, and He who gives them their form is their agent.”

⁴⁹ At *LC Metaphysics* 1524–25, Averroes invokes Aristotle's distinction between an “agent (*fa'il*)” and a “mover (*muharrrik*)”: an agent is a mover that only changes something in respect of its quality (like white or hot: *On Generation and Corruption* 323a). “Mover” is therefore more appropriate to be a principle than “agent” – and of course the celestial intellects are efficient causes in the sense of being “movers.” But it does not seem that Averroes is careful to observe the terminological distinction throughout *LC Metaphysics*, hence his saying here for instance that the intellects are “agents” insofar as they cause motion. (Here I accept Bouyges' suggested text to fill a lacuna, which is supported by the Latin and Hebrew versions.)

⁵⁰ Thus Kogan 1985: 264 is basically right to say that here “God's efficient causation is explained on a purely formal/finalistic model,” but for Averroes this in no way detracts from the accuracy of calling God and the other movers efficient causes.

“in expression (*bi-l-qawl*)” even though they are “extensionally (*bi-l-mawḍūʿ*)” one (*LC Metaphysics*).⁵¹

Before concluding, we should ask one last, important question: it seems that everything Averroes has said on these topics would apply to God in common with all the other celestial movers. So, what, if anything, is special about the divine case? Helpfully, Averroes tells us the answer with respect to both final and formal causation:

It is evident, in the case of the other principles, that they are chosen and desired⁵² for the sake of (*min ajl*) something else, that is, the principles of the other motions aside from the diurnal motion, whereas the mover of this [diurnal] motion is evidently chosen in itself (*bi-dhātihī*).⁵³

Because the situation of the ultimate mover for everything, i.e. the First, is like the situation of the proximate mover, and the first mover moves all forms, it is clear that the form of the first mover is in some way all forms.⁵⁴

The distinctive role of God has nothing to do with the type of causation He exercises, but only with the fact that He sits atop both the chains of formal and final causality. Here Averroes is reading *Lambda* through the lens of *Alpha Elatton*, in which Aristotle establishes the need for first principles in these modes of causation.

Grasping God as a *primary* cause for *all* things already gives us reason to think that these conclusions are uniquely appropriate to metaphysics. But Averroes can and does add a bit more to convince us of this claim. With respect to formal causation, he argues that the forms of all things must be present in God’s mind (like art in the mind of the artisan, *LC Metaphysics* 1505–6, 1652, 1702).⁵⁵ This gives us a firm link between the study of God as formal cause and metaphysics as the study of being qua being:

Because [God] knows only Himself, He knows the existents through the existence which is the cause of their existences . . . the First is He who knows the nature of being *qua* being in an absolute way, which is Himself.⁵⁶

In the case of final causation, the relevant metaphysical property is not being but unity. As Averroes emphasizes toward the end of his

⁵¹ Cf. Di Giovanni 2014: 75–76, and Genequand in Averroes 1984b: 22, who in this context rightly cites the passage at *Physics* 198a, which I have quoted at the head of this chapter.

⁵² I retain Bouyges’ edition against Genequand, who rather than taking the feminine ending reads *-hu* in both cases (“choose it and desire it”). The parallel construction in the following sentence (“chosen for its own sake”) supports Bouyges’ reading.

⁵³ *LC Metaphysics* 1604. ⁵⁴ *Ibid.*, 1529.

⁵⁵ On God’s knowledge and how it differs from ours, see further Druart 1993.

⁵⁶ *LC Metaphysics* 1707–8. I borrow the translation from Di Giovanni 2014: 74.

commentary on *Lambda*, as the ultimate end for all things God guarantees the unity and mutual arrangement of all things (see especially *LC Metaphysics* 1650 and compare *Ep. Metaphysics* 163 and *Incoherence of the Incoherence* 172).⁵⁷ In this way Averroes can retain something of the approach found already in al-Kindī, where “first philosophy” is presented as a study of God as the “true One” who is the cause of all unity.⁵⁸

Conclusion

Averroes’ overall approach to philosophical theology is nicely summed up in the following passage:

There is a substance that is eternal, which is unmoved and separate from all matter. The fact that it is [indeed] a substance, that it is an intellect, that it is a mover after the fashion of the beloved moving the lover, and that it has all the other attributes that have been shown to belong to this mover, is something proven in this book [sc. *Lambda*]. The fact that it is unmoved and separate from matter is proved at the end of *Physics* book VIII.⁵⁹

God is not studied in one or the other science, but from two points of view. First physics establishes the existence of immaterial efficient causes. Metaphysics goes on to examine this efficient causality from a maximally general perspective, and in so doing discovers that the same causes exert formal and final causation.⁶⁰

A better understanding of Averroes’ methodologically nuanced distinction between the contributions of physics and metaphysics may help toward resolving a tension pointed out in a fundamental article by Amos Bertolacci.⁶¹ He shows that Averroes “oscillates” between what we might call an “ontological” and “theological” understanding of metaphysics, the former meaning that the science is conceived of as the study of being qua being, the latter that it is seen as a study of God. Without necessarily claiming to account fully for the tensions exposed by Bertolacci, I would point out that for Averroes, it is too simple to ask which science has God as

⁵⁷ The providential order of the universe is also the basis for one of the two proofs of God’s existence Averroes finds in the Qur’ān: see *Exposition* 118–19; English at Averroes 2001c: 33. For the connection between heavenly motion and providence, see also Cerami 2015a: 666–71.

⁵⁸ See also al-Fārābī 1985: §2.3, for the idea of God as the ultimate cause of the unity of things.

⁵⁹ *LC Metaphysics* 1626.

⁶⁰ As already pointed out by Cerami 2015a: 551: “seule la métaphysique démontre que Dieu et la cause finale et formelle ultime, mais seule la physique peut en démontrer l’existence.” She also makes the important point (at 549 and 669) that the coincidence of formal, final, and efficient causality gives unity to the science of metaphysics.

⁶¹ Bertolacci 2007.

its subject matter. Though it is true that God falls under the remit of metaphysics, this applies only to God *seen in a certain way*. Methodologically speaking, an understanding of metaphysics as being qua being is presupposed by the theological inquiry of *Lambda*. Thus it is only from the point of view taken by the student of being qua being that the metaphysician investigates God.⁶² We might compare this to the way that, according to Aristotle, anger is studied by the physicist as the boiling of blood around the heart but by the dialectician (ὁ διαλεκτικός) as a certain sort of desire (*On the Soul* 403a29–30). Neither of them can claim to tell the whole story about anger. Likewise, Averroes is of the view that theology belongs to no one science. It can only be a joint effort undertaken by the physicist and the metaphysician.

⁶² Here I am in full agreement with Di Giovanni 2014: 76, who writes that “the challenge for the Commentator lies not so much in deciding whether to side with a theological or ontological characterization of Aristotle’s *Metaphysics* but in supplying an interpretation where *both* the theological *and* the ontological strands can be brought together and successfully reconciled.” My argument here can be seen as complementary to that of Di Giovanni, whose discussion focuses more on the idea of focal meaning.

Averroes' Goals in the Paraphrase (Middle Commentary) of Aristotle's Nicomachean Ethics

Frédérique Woerther

Completed two years after his *Paraphrase (Middle Commentary)* of Aristotle's *Rhetoric* on May 26, 1177, Averroes' *Paraphrase of the Nicomachean Ethics* (henceforth *Paraph. Nicomachean Ethics*) is the earliest complete extant commentary on the *Nicomachean Ethics*. It belongs to a lengthy exegetical tradition lasting several centuries, from which works earlier than the twelfth century are known to us only through fragments.¹ The commentary was created on the basis of an Arabic version of the *Nicomachean Ethics* from which a single witness survives today, preserved in a manuscript in the Qarawiyyīn library in Fez, dated 619 AH (1222 CE).

The original Arabic version of the *Paraph. Nicomachean Ethics* is now lost apart from thirty small fragments preserved in the margins of the unicum of Fez, and the longest of these fragments is no more than two lines.² However, the *Paraph. Nicomachean Ethics* is available in two medieval translations, Latin and Hebrew. The Latin version was made by Hermann the German in Toledo in 1240. Samuel of Marseille completed the Hebrew version nearly a century later, in 1321 (and completed his final revision of it in 1322) on the basis of an Arabic copy that differs from the one used by Hermann though it belongs to the same tradition.³ The Hebrew version is available today in a modern critical edition by Berman.⁴ Hermann's Latin translation is represented by thirteen manuscripts and at least thirteen printed editions from the Renaissance.⁵ I am preparing the edition of the modern edition of the Latin translation.

A brief glance at previous scholarly work on Averroes' Commentary reveals that the *Paraph. Nicomachean Ethics* has hardly received any attention from modern specialists in *falsafa*. Even specialists in Aristotle have

¹ Gauthier and Jolif 1970: 100–111; Natali 2003: 182–83; Zonta 2003: 194–95; Dunlop in Aristotle 2005: 1–109.

² Berman 1967c.

³ See Berman 1967a, 1967b, and 1978; Woerther 2018.

⁴ Berman 1999.

⁵ Korolec 1992.

shown no interest. In a preliminary examination of the text, Berman has shown that, in the *Paraph. Nicomachean Ethics*, Averroes mostly limited himself to resolving the difficulties of the Arabic version of the *Nicomachean Ethics*.⁶ More recently, Steven Harvey put forward a rather pessimistic view on the basis of his analysis of sections of books VIII and X: Harvey claims that the *Paraph. Nicomachean Ethics* has proved to be “among the least helpful of his middle commentaries for understanding an Aristotelian text.” In the section of the *Paraph. Nicomachean Ethics* X he studied, Harvey concludes that “there is no reorganization of the text, little reformulation, and only slight explication of and digression from it.” This is despite the fact that Averroes occasionally inserts his own phrasing, corrects the text of the *Nicomachean Ethics*, and replaces certain elliptical expressions of Aristotle’s text with a fuller version based on his own understanding.⁷

Subsequently, Harvey and I collaborated on a study of *Paraph. Nicomachean Ethics*, book I, and reached similar, but slightly different conclusions: “Averroes, for the most part, copies the text of the Arabic translation, but he does not hesitate to insert words as he copies in order to make the text clearer and easier to understand. Where lengthier explanations are needed, they too are provided between sentences of the Arabic text, but these lengthy explanations and even reworkings of the text in book I are usually not so helpful or insightful, and, in some cases, misleading.”⁸ We also pointed to some instances of Averroes’ rearranging the Aristotelian text and omitting certain passages.⁹ In short, most of the *Paraph. Nicomachean Ethics* appears to be little more than a gloss, clarifying a text whose style is rather rough.

How then ought one to read the *Paraph. Nicomachean Ethics*? In other words, since the (philosophical) value of the *Paraph. Nicomachean Ethics* is not immediately clear to a modern reader, what would be the appropriate expectations to bring to this text? One way to respond to this question would be to identify Averroes’ goal in writing the *Paraph. Nicomachean Ethics*. Three points in particular require clarification:¹⁰

What is Averroes’ exegetical method in the *Paraph. Nicomachean Ethics*?
How does Averroes conceive the role of ethics within Aristotle’s writings, and how in particular does he define the relation between ethics and politics?

⁶ Berman 1999: 20, 23.

⁷ See Harvey 2007.

⁸ Harvey and Woerther 2014: 283.

⁹ Ibid.,

¹⁰ I refer to the Latin version of the text, systematically compared with the Hebrew version in order to establish with greater reliability what the Cordovan intended.

What kind of epistemology does Averroes bring to the *Paraph. Nicomachean Ethics*, and how shall we describe the target audience of the commentary?

The Exegetical Method of the *Paraph. Nicomachean Ethics* and the Genre of the *Talkhīṣ* (Middle Commentary)

The Arabic term *talkhīṣ* – usually translated as “middle commentary” or “paraphrase” – does not offer a precise, a priori notion of the exegetical method of the *Paraph. Nicomachean Ethics* since that method seems to vary from one treatise to another. Gutas¹¹ has shown that the Arabic idea of *talkhīṣ* designates not some particular genre or literary form but a procedure that aims at “exposing” something explicitly. In fact, the classical usage of this term suggests two main senses: the first sense, older and more common, goes back to the idea of delimitation (“in considering something to distinguish and differentiate it from its heterogeneous elements, to determine its precise limits and to display them while exposing the elements precisely and in detail”), and the second sense goes back to the idea of “declaration, explicit mention,” not in the sense of interpreting or commenting but in the sense of a procedure that consists in displaying something in a precise and explicit manner. The second sense of the term, which arose around the tenth century, goes back to the idea of “summarizing,” that is, to “presenting the essential points of a book in a precise manner” after they have been identified and specified. Further, *lakhkhāṣa* neither refers to “commenting on” – in the sense of *sharḥ* or *tafsīr* – nor does it imply the idea of “paraphrase.” The term *talkhīṣ*, having the sense “summary of essential points” (which occurs only after the eleventh century), is relatively unambiguous, “although for the later centuries the meaning tends to exclusively that of ‘summary.’”¹²

Averroes’ use of the term *talkhīṣ* has given rise to many points of confusion. Scholars have generally distinguished *talkhīṣ* (middle commentary) from *jawāmi‘* (synopsis) on the basis of formal criteria,¹³ but Gutas firmly rejected this interpretation because Averroes’ terminology lacks any kind of strict coherence. Far from being merely formal, the distinction between the synopses and the middle commentaries has to do with the different goals of the two types of commentary. “Averroes himself uses the term *lakhkhāṣa* freely, apparently because he did not intend to designate a

¹¹ Gutas 1993: 38–43.

¹² Ibid., 41.

¹³ See for example Steinschneider 1893: 52.

specific genre by that word.”¹⁴ For example, he refers to the same work – the *jawāmi*‘ devoted to the *Physics* – sometimes as a *tajrīd* (summary), sometimes as a *talkhīṣ* (exposition), sometimes as *al-jawāmi*‘ *al-ṣighār* (small synopsis). The terms *tajrīd* and *talkhīṣ* refer to “operations controlling composition,” while *jawāmi*‘ is a generic term. It is this situation that makes it possible to explain why Averroes uses the term *talkhīṣ* for works that formally are quite different from one another:

It appears that the *talākhīṣ* of the *Organon* are different in their structure and purpose from those on the physical treatises, and these again are equally different from the *talākhīṣ* on the works of Galen. Inevitably, therefore, if the operations at work during the compilation of Averroes’ Aristotelian works are relatively interchangeable, it must be the purpose behind these operations which will provide the discriminating factor and consequently identify generically these works.¹⁵

This is not the place to undertake a general study of *talkhīṣ*, which would involve comparing the different ways in which this mental procedure is realized in Averroes’ treatises. Nor is it the place to consider the connections – logical or chronological – between this exegetical method and the other kinds of work produced by Averroes.¹⁶ Rather, following up on two separate studies conducted in collaboration with Maroun Aouad¹⁷ and Steven Harvey,¹⁸ my goal here is merely to describe briefly and systematically the different procedures that Averroes employed in creating the *Paraph. Nicomachean Ethics*.

The primary modification that Averroes imposed on the *Nicomachean Ethics* is cutting up the text into sequences of varying length, which are introduced by the Latin formula *dixit* – Hebrew *amar*, corresponding to Arabic *qāla* – ([Aristotle] said). This reorganization of the text, in which Aristotle is presented as the authority who states the subject matter, does not prevent Averroes from intervening, especially in passages introduced by the Latin *intendo* or *dico* (“I mean”). Far from being opposed to each other, these two ways of voicing statements – Aristotle and Averroes’ philosophical “I” – contribute to the same goal: hidden under the mask of a universal subject, they aim to expose the truth of Aristotle’s text in the

¹⁴ Gutas 1993: 41. ¹⁵ Ibid., 42.

¹⁶ On the distinction of the various types of commentaries and their methods, see Harvey forthcoming.

¹⁷ Aouad and Woerther 2009. ¹⁸ Harvey and Woerther 2014.

best possible manner.¹⁹ In relation to this division of the text into sequences, the syntagmatic rupture consists, for Averroes, first, in joining together into a single unity of form and content two items that were distinguished from each other in the *Nicomachean Ethics* and, second, in separating out distinct items that appear in the *Nicomachean Ethics* as a single unit. In other words, he connects to a new development an element that originally had its place, and thus also its meaning, elsewhere.

If he merely copies the text of Aristotle, a common enough occurrence, Averroes also imposes on the Arabic version of the *Nicomachean Ethics* that he is using a series of transformations at the level of microstructure. He can be seen to be making an abridgement of the text, either by eliminating words that seem to him redundant, superfluous, or too obscure to be preserved in the commentary or by rewriting Aristotle's text in a more concise manner. Thus he produces a new text that arises from a kind of synthesis and he avoids slavish adherence to the literal formulation of the text that he is commenting on.

Averroes also subjects the *Nicomachean Ethics* to certain procedures of augmentation. Under this rubric one would place the lengthy passages that are added to the text and that have no direct correspondence – with regard to the literal or primary sense – in the *Nicomachean Ethics*, and for which Averroes takes exclusive responsibility. This occurs, for example, in the passage that he inserts into *Nicomachean Ethics* VIII 10, 1160b31–1160b22, where he compares the manner in which Plato and Aristotle classify political regimes, and where he proclaims that Aristotle's arrangement is closer to reality. On the other hand, he also makes Aristotle's text denser by inserting certain words or groups of words that allow him to explain Aristotle's purpose and that remove any possible ambiguity in interpreting the *Nicomachean Ethics*.

Finally, Averroes sometimes transfers a passage, of whatever length, into a context that differs from its original position, thus creating a

¹⁹ See Gätje 1964: 60, where he writes: "Ziel der gesamten Tätigkeit des Averroes ist nach dessen eigenem Zeugnis das 'richtige' Verständnis des Aristoteles. Andere philosophische Aufgaben hat Averroes nicht anerkannt. In dem Begriff des richtigen Verstehens liegt natürlich zunächst die Tendenz zu einem objektiven Verständnis, d.h. zu einer Darstellung der aristotelischen Philosophie so, wie sie von Aristoteles selbst gemeint und verstanden war. Es ist aber bezeichnend, daß Averroes den Begriff des richtigen Verstehens auch immer mit einer gewissen polemischen Nuance verbindet, einer Polemik nämlich gegen das überkommene, von griechischen und arabischen Aristotelikern geprägte Aristotelesbild. In diesem Sinne ist richtiges Verstehen für Averroes nicht allein Bezug auf die Quellentexte, sonder auch Überprüfung und Korrektur der exegetischen Tradition. Averroes geht also aus von einem historisch gegebenen, zu seiner Zeit aktuellen Aristotelesbild und versucht, dieses richtigzustellen."

displacement. Likewise, he might substitute one term with another one that is more technical or more precise, with the purpose of giving Aristotle's text greater coherence, though in the process he also changes Aristotle's original intention. For example, when commenting on VIII 1 he replaces the Arabic term *faḥṣ* (examination), which is somewhat general, with the Latin term *scientia* (Hebrew *chokmah*), a kind of replacement not uncommon in the *Paraph. Nicomachean Ethics*; or again he replaces the singular *al-maḥabba* with the plural *dilectionibus*, thereby anticipating Aristotle's later distinction of three kinds of friendship.

The Place of Ethics in the Aristotelian Corpus According to Averroes

Following Aristotle, in the opening lines of his commentary Averroes does not specify the nature of the *Nicomachean Ethics* or the role this treatise plays in the entire economy of Aristotle's output, as he conceives it. It is only in the epilogue of the *Paraph. Nicomachean Ethics* that he addresses the question by articulating the differences between the two "sciences" (*scientie*) that are known as ethics and politics, working on the basis of a previously established comparison with the parts of medicine:

And here ends the discussion about this part of this science (*in hac parte huius scientie*), and it is that part that, in political science (*in scientia ciuili*), is like the knowledge of what health and sickness are in the art of medicine (*quid est sanitas et egritudo in arte medicinae*), and the part that he promised is the part which will be, in this science (*in hac scientia*), like the bringing about of health and the removal of sickness in the art of medicine (*effetiue sanitatis destructiue egritudinis in medicina*), [and this part is found] in his book called the *Book of the Regime of Life* (*in libro eius qui nominatur liber de regimine uite*).²⁰

Political science would consist of two parts, the first embodied in Aristotle's *Nicomachean Ethics* and the second in the *Book of the Regime of Life* (which designates Aristotle's *Politics*). The latter was not available to Averroes, who felt constrained to replace it with Plato's *Republic*. Therefore, ethics (represented by the *Nicomachean Ethics*) and politics (represented by the *Republic*) correspond, respectively, to the science that, on the one hand, considers what health and sickness are and, on

²⁰ *Paraph. Nicomachean Ethics, explicit*; Hebrew text in Berman 1999: 354.722–25. English translations of the *Paraph. Nicomachean Ethics* have been made from the Latin version of Averroes' text. With the valuable help of Steven Harvey, they have been checked with the Hebrew translation to make sure that there is no significant inconsistency between these two versions.

the other hand, to the science that considers how health is produced and sickness eliminated.

Averroes mentions this same idea at the beginning of his *Paraph. Republic*. It is put forward as the counterpart to the *Paraph. Nicomachean Ethics*. Practical science, in Averroes' view,²¹ differs from the speculative or theoretical sciences not only in the subjects that are treated but also in their respective principles. The subject matter of practical science consists of volitional matters whose realization depends on us. The pertinent principle is will and choice; while the pertinent principle of physics is nature and its subject matter is natural things, the pertinent principle of metaphysics is god and its subject matter consists of divine things. Practical science differs further from the speculative sciences insofar as the former aims at action, whereas the latter aim at theoretical knowledge.

Medicine has the same distinction since it too is divided into practical and theoretical parts. Politics is likewise divided into two parts: the first part, which corresponds to the *Nicomachean Ethics*, considers in an exhaustive fashion acquired habits, actions dependent on the will and behavior in general, and the relationship between them. The second part, which corresponds to Plato's *Republic*, reveals the manner in which these habits are rooted in the soul, which ones among them have the capacity to be realized perfectly in action, and so on. In other words, it bears on matters that can be realized insofar as they are determined by general principles. The first and second parts of political science correspond, in regard to medicine, to the *Book of Health and Sickness* and to the *Book of Preserving Health and Eliminating Sickness*.²² Thus ethics constitutes the theoretical part of the practical science that is politics. Unlike a purely theoretical science, it aims at action, but it does so in a manner that is more general and more theoretical than politics.

The testimony of Averroes' *General Principles of Medicine*, known as *Colliget*, allows us to specify the relationship that exists between ethics and politics, on the one hand, and practice, on the other. This treatise is presented as general in scope (Latin *uniuersalis*) because it presents medical doctrine starting from general rules of the science, and on that basis it leads up to the particular matters that Averroes calls "the members and the parts." These will, Averroes says, be studied in a forthcoming book, but he contents himself, at the end of the *General Principles*, with referring these

²¹ *Paraph. Republic*, at Averroes 1974: 3–4.

²² *Ibid.*, 4. Cf. Samuel ben Judah of Marseilles, epilogue to his Hebrew translation of Averroes' *Paraph. Nicomachean Ethics*, English at Berman 1967a: 304–5.

issues to the *Taysīr* of Ibn Zuhr (Avenzoar, d. 1161).²³ Thus he made the study of particular issues in medical science a counterpart to the *General Principles*, which is a study of general issues. I omit detailed discussion of the summary that Averroes provides in the prologue of the *General Principles* and merely note that the treatise can easily be divided into two parts: the first part would include books I (*Liber de anatomia*), II (*Liber de sanitatis*), III (*Liber egritudinum*), IV (*Liber signorum*), and V (*Liber medicinorum et ciborum*). Here one finds mention of the books (II) *On Health* and (III) *On Sickness*, which correspond, in the domain of political science, to ethics. The second part of the *General Principles* would include books VI and VII, titled by Averroes, respectively, as the *Liber conseruationis sanitatis* and *Liber medicationis egritudinum*. In other words, these two books correspond to the part that was presented as the analogue of Aristotle's *Politics* or Plato's *Republic* (cf. in the *Paraph. Nicomachean Ethics* "[Knowledge of the] productive behavior of health and destructive behavior of sickness" and in the *Paraph. Republic: Book of Preserving Health and Eliminating Sickness*).

This statement about the two parts of the *General Principles* indicates, first, that the general rules that are revealed in the domain of medicine have their analogue in the domain of political science, and they correspond, respectively, to ethics and politics; second, that by virtue of this analogy, the unity formed by ethics and politics constitutes the totality of political science, intended as an account of the general rules. In other words, and contrary to the view of Feldman,²⁴ the *Paraph. Republic* does not concern itself with particulars – in opposition to the "general" that is treated in the *General Principles* – but both the *Paraph. Nicomachean Ethics* and *Paraph. Republic* outline general rules and both come under the framework of science. There is no political treatise that is analogous to the *Taysīr* of Ibn Zuhr. Possibly the counterpart is political action itself.

One final testimony makes it possible to confirm, clarify, and illustrate the relationship between ethics and politics. It comes in the second lemma of Averroes' commentary on Avicenna's *Medical Poem* (*Urjūza*), where Averroes deals with Avicenna's division of medicine into theoretical and practical parts. Averroes begins by distinguishing among rational procedures (*ex operationibus rationalibus*) those that, on the one hand, are called "practical and in relation to action" (*practice et actiue*; *'amaliyya*) because they are known and taught by means of action (*operando*; *bi-l-'amal*), such

²³ That is, Ibn Zuhr 2010.

²⁴ Feldman 1994: 38–41, 48–55, 57–58.

as the procedure or art of carpentry or sewing, and those that, on the other hand, are called “arts,” which are taught as science, by means of demonstrations and definitions that make it possible to know a thing in a perfect and complete fashion.²⁵ This latter definition corresponds to the definition of art.

Essentially, Averroes recognizes two main parts of medicine. The first corresponds to a manual procedure that is taught not by means of scientific discourse (with the exception of a very small part), but in its actual use. It corresponds to the *particularia* of medicine, that is, according to the *General Principles*, to the *Taysīr* of Ibn Zuhr, because Averroes never completed this part concerned with *particularia*. The second part, which corresponds to the *universalia* and whose content is gathered in the *General Principles*, is divided into two:

Thus, the manner of this division is like saying that the science of the medical art (*scientia artis medicine*) is divided into two sciences or scientific parts (*in duas scientias seu partes scientificas*), to wit, [1] the science of that to which the master of natural science conjoins (*in scientiam eius cui coniungitur dominus scientie naturalis*), and [2] that which is separate from it, that is like saying that the physician considers in his art two sciences at the same time: [a] the science through which one considers health, its cause, and its signs, and sickness, its cause and its signs, and [b] the science that one considers in one’s art to be that through which one considers the conditions and the means through which one can preserve health, as well as the conditions and means through which one can cure sickness – and it is this that is particular to the art of medicine. But the part through which this science conjoins with (*coniungitur*) natural science is truly and properly science; that is to say, it is so because the end which is intended is knowledge alone and not action (*solum scire et non opus*). But the other part is called for particularly in consideration of the art of medicine, and perhaps it is called practical or related-to-action (*praxis siue actiua*) because it is associated with and next to the operation (*affinis . . . et propinqua operationi*).²⁶

The theoretical part of medicine that corresponds to ethics properly deserves the name of science; it borders on natural science and aims uniquely at knowledge. The practical part – which still belongs to “science” – considers the conditions in which this purely scientific knowledge can be put into practice.

²⁵ The Arabic version (*Comm. Medical Poem* 48) has “and the other [parts of the medicine] are called scientific (*‘ilmiyya*) and are taught by science (*bi-l-‘ilm*), I mean by demonstration and definitions.”

²⁶ Averroes 1962: X.221. Cf. the Arabic version of the text in *Comm. Medical Poem* 48.16–21.

The Epistemic Framework of the *Paraph. Nicomachean Ethics*

The elements that make it possible to define the epistemic framework of the *Paraph. Nicomachean Ethics* appear essentially in the first three chapters of book I, whose subject matter consists in determining:

what ought to be the character of the learner of this art (*qualis debeat esse discipulus huius artis in moribus suis*) and what is the aim which we intend in this discussion (*quod est propositum nostrum in hoc sermone*), and it is the governance of cities, and from which genus are the arguments (*cuius generis sunt ratiocinationes*) employed on this occasion, that is, from which level of assent and concept (*scilicet cuiusmodi oportet esse ordinem earum in credulitate et formatione*) they must be.²⁷

A comparison of this passage with Aristotle's original text, in the Greek version²⁸ as well as in the Arabic version (hereafter *Ar. Nicomachean Ethics*),²⁹ shows that Averroes expands the text he comments on by using technical terms borrowed from the domain of logic. In effect, he makes clear that he has just determined "the genus of arguments" that are used in ethical science, "from which level of assent and concept they must be." These latter two terms, which no doubt translate the Arabic *taṣdīq* and *taṣawwur*, indicate that he has specified the degree of certainty that one should expect in the domain of ethics. Thus he has presented his interpretation of ethics in logical terms.

Averroes recognizes that objects that are treated in ethical science do not belong to a regime of necessity: susceptible to change, they are contingent or "possible" entities. Aristotle recalls, at the beginning of *Nicomachean Ethics* I 3, that the matter (ὑλη) of politics does not admit of rigorous and exact treatment because the diversity of objects that are studied entails a diversity of methods, and that politics is characterized by a large number of different judgments and evaluations.³⁰ In his commentary, Averroes returns to the vocabulary of logic to confirm that the nature of the

²⁷ On Averroes' addition, see Harvey and Woerther 2014: 268.

²⁸ *Nicomachean Ethics* I 3, 1095a11–13: "These remarks about the student (περὶ μὲν ἀκροατοῦ), the way in which our statements should be received (πῶς ἀποδεκτέον), and the purpose of the inquiry (τί προτιθέμεθα), may be taken as our preface" (trans. Barnes).

²⁹ *Ar. Nicomachean Ethics*, at Aristotle 2005: 117.18–19: "This is the extent of what is necessary for us to prefix to our discussion, in regard to how the learner of this art must be (*al-muta'allim li-hādhibi l-ṣinā'a kayfa yanbaghī an yakūna*) and what the aim is which we pursue in it (*wa-mā l-gharaḍ alladhī qaṣadnāhu fihā*)" (trans. Dunlop).

³⁰ *Nicomachean Ethics* I 3, 1094b11–16; *Ar. Nicomachean Ethics*, at Aristotle 2005: 115.13–17.

statements (*sermone*s) used in politics must follow the nature of the subject with which they are concerned:

[Aristotle] said: it may suffice for what we are speaking about if the arguments we bring are in accordance with what is possible in the subject matter. He [sc. Aristotle] means the premises of the inductive proofs that are for the most part, and not necessary (*uult ut sint propositiones demonstrationum inductarum, sicut in pluribus, non autem necessarie*). [Aristotle] said: for one ought not to seek certitude (*certitudo*) in all arts in the same manner, but one must attain in each art [what one can] according to the subject matter which that art examines (*immo oportet ut requiratur in omni arte secundum materiam in qua speculatur talis ars*), just as one ought not to seek certitude in the same manner in all things that are made. [Aristotle] said: beautiful matters that relate to justice are precisely what this art investigates, that is the art of the governance of cities – and they contain such an amount of difference and error, since their material is possible, that most people have thought that we possess just and good things only by law, that is by convention, and that there is nothing that is beautiful or just by nature.³¹

Thus the formulations of political science are, in their proper sense, “demonstrations” (*demonstrationes*) that, established on the basis of particulars, lead to general conclusions, but they hold only for the most part (*sicut in pluribus, non autem necessarie*). Averroes’ use of the technical term “demonstration” here looks back to a syllogistic type of argument whose premises are not necessary ones. The degree of certainty that one can properly expect in a political demonstration is merely a matter of probability because the matter of politics belongs to the regime of the possible (*possibilis*), as shown by the different views that characterize it, especially, for example, in regard to the question of the natural or conventional character of justice.³² This characterization of political reasoning entails two consequences:

1. First, such an argument is not scientific in the full sense of the term. Averroes describes it as a “general formulation” (*sermo uniuersalis*), closer to a sketch than to a mathematical kind of demonstration.³³ The “general” argument thus allows one better to describe and, in a theoretical manner, to approach the objects that fall under the regime

³¹ *Paraph. Nic. Eth.* on I 3, 1094b11–16; Hebrew at Berman 1999: 60.62–61.71; see *Ar. Nicomachean Ethics*, at Aristotle 2005: 115.13–17; cf. Harvey and Woerther 2014: 266.

³² A similar idea can be found in *Paraph. Nicomachean Ethics* on I 7, 1098a26–32 (*Ar. Nicomachean Ethics*, at Aristotle 2005: 137.1–5).

³³ *Paraph. Nicomachean Ethics* on I 2, 1094a22–b 8.

of what arises for the most part (ὥς ἐπὶ τὸ πολὺ). Although the subject matter of ethical inquiry falls under the category of variation, this does not exclude a certain degree of conviction, albeit one that cannot be assimilated to the certainty that is to be expected in the exact sciences. In the following chapter Averroes evokes as well the “approximate and schematic way” (*per uiam grossam et exemplarum*), i.e. through definitions and descriptions that are adapted only most of the time, that is appropriate for arguing in politics.³⁴

2. Second, this logical reduction of political material occurs in a demonstration that is constructed on the basis of premises that are valid only for the most part. This entails a different characterization of the audience of the ethics in comparison with Aristotle’s *Nicomachean Ethics*. As Richard Bodéüs has shown,³⁵ Aristotle addressed his material to the lawgiver (νομοθέτης), that is, to a person who simultaneously satisfies the demands of a certain level of intelligence and culture and who at the same time experiences the desire for instruction because he pursues goals that are not speculative but practical. The political man is characterized by a certain critical capacity that crystallizes in the concept of being “educated” (πεπαιδευμένος, Arabic *adīb*).³⁶ Thus, Aristotle continues, the student of the lessons in the *Politics* cannot be a young man: still under the sway of the passions and lacking experience, he does not know how to draw anything useful or profitable from political instruction.

For the experience and general education (*paideia*) required by Aristotle,³⁷ Averroes substitutes mastery of the art of logic:

³⁴ Ibid., on I 3, 1094b19–23. ³⁵ Bodéüs 1982: 181–219.

³⁶ *Nicomachean Ethics* I 3, 1094b23–24 (= *Ar. Nicomachean Ethics*, at Aristotle 2005: 117.5). According to Bodéüs 1982: 201, the man who received a liberal education (πεπαιδευμένος) is opposed to the man of science, but can still judge correctly, like the man of science: “c’est même là ... une finalité de la παιδεία au regard du Stagirite. D’où l’équivalence, admise en chaque matière – par exemple en médecine – du πεπαιδευμένος et de l’ἀγαθὸς κριτής. Cela revient à dire qu’il existe en chaque domaine de l’art ou de la science (par exemple la médecine) des gens qui sont en face de l’artiste ou du savant accompli dans le même rapport que l’homme libéral ayant reçu une éducation musicale en face du musicien professionnel: des personnes en mesure de juger correctement les œuvres d’autrui (par exemple, une opération médicale), comme ce dernier les mélodies ou les chants exécutés par un tiers.” Therefore the concept of *pepaideumenos* “témoigne de ce que chaque matière (ὅλη ὑποκειμένη), au regard du philosophe – pour peu qu’elle nous soit familière – nous enseigne *elle-même* la démarche obligée du discours qui la prend pour objet” (Bodéüs 1982: 209).

³⁷ *Nicomachean Ethics* I 3, 1094b23–27: “For it is the mark of an educated man (πεπαιδευμένου) to look for precision in each class of things just so far as the nature of the subject admits: it is evidently equally foolish to accept probable reasoning from a mathematician and to demand from a rhetorician demonstrative proofs.” All translations from the *Nicomachean Ethics* are from Barnes,

For it is the way of the wise man, I mean the one who receives instruction in the art of logic (*prudentis . . . intendo instructum in arte Logices*), that the attainment of his search for certitude of the argument in each one of the genera sought for should be in accordance with what the nature of that genus admits. For the mistake is the same if one accepts a sufficient persuasion from the mathematician or one seeks demonstration from the rhetorician.³⁸

In effect, it is the art of logic that will make the student capable of making the distinction between what is correct and what is not.³⁹

[Aristotle] said: and each man judges well only what he knows. The proficient judge in a given matter is the one who judges well this thing, and he is wise in this genus, that is, he is the one who knows the specific logic that is particular to this genus (*id est cognitor Logices particularis que appropriatur illi generi*). The proficient judge without qualification is the one who judges well everything that is correct, of course, and that is not correct; and this is the wise man without qualification, I mean, who is wise in the art of the common Logic (*dico eum qui prudens est in arte Logices communis*). [Aristotle] said: therefore, the political instruction (*doctrina civilis*) is not suitable for a young man. For a young man is inexperienced in the actions which must occur in the course of life, that is, he is inexperienced in recognizing what is correct from what is not correct (*scilicet non discernit rectum a non recto*).⁴⁰

Aristotle's general education is thus interpreted by Averroes as an education in the general principles of logic. That is, the method applied in the

slightly modified; *Ar. Nicomachean Ethics*, at Aristotle 2005: 117.5–7: "For it is characteristic of the educated man (*al-adīb*) that the extent of his search for completeness (*li-l-istiṣā*) in each class of the things sought for should be in accordance with what the nature of that thing which is sought for admits, because it is the same if one accepts from a mathematician probable words . . . or from a rhetorician demonstrative proof."

³⁸ *Paraph. Nicomachean Ethics* on I 3, 1094b23–27; Hebrew at Berman 1999: 61.78–81; cf. Harvey and Woerther 2014: 268.

³⁹ Cf. *Nicomachean Ethics* I 3, 1094b27–1095a3: "Now each man judges well the things he knows, and of these he is a good judge (ἀγαθὸς κριτής). And so the man who has been educated in a subject (καθ' ἑκάστον μὲν ὅρα ὁ πεπαιδευμένος) is a good judge of that subject, and the man who has received an all-round education (ὁ περὶ πᾶν πεπαιδευμένος) is a good judge in general. Hence a young man is not a proper hearer of lectures on politics (τῆς πολιτικῆς . . . ἀκροατής); for he is inexperienced in the actions that occur in life (ἄπειρος γὰρ τῶν κατὰ τὸν βίον πράξεων)"; *Ar. Nicomachean Ethics*, at Aristotle 2005: 117.7–11: "Each man judges well only . . . and in these things is found a skilful judge (*ḥākim ḥādhiq*). The skilful judge in each matter (*ḥākim ḥādhiq fī kull wāḥid al-ashyā*) is the man educated in that matter (*al-adīb fidḥālīka l-shay*), and the skilful judge absolutely (*al-ḥākim ḥādhiq 'alā l-iṭlāq*) is the man educated in everything (*al-adīb fīkull shay*). Therefore to study politics (*ta'allum tadbīr al-mudun*) is not suitable for a young man, because a young man is inexperienced (*ghayr khabīr*) in the actions which occur in the course of life."

⁴⁰ *Paraph. Nicomachean Ethics* on I 3, 1094b27–1095a3; Hebrew at Berman 1999: 61.82–62.86; see *Ar. Nicomachean Ethics*, at Aristotle 2005: 117.7–11.

realm of ethics consists, in effect, in distinguishing, among the most common or most persuasive opinions, those that are correct from those that are in error. Aristotle alludes to this point briefly, at the beginning of *Nicomachean Ethics* VII, as an echo of what he showed in book I:⁴¹

Now, as in all other subjects [treated here], we must set down the facts as they appear to us (τιθέντας τὰ φαινόμενα), and after first considering the difficulties (πρῶτον διαπορήσαντας), go on to show (δεικνύναι) the validity, if possible, of all the common opinions (πάντα τὰ ἔνδοξα) about these affections, or, if not, at least most of them and the most authoritative of them; for if these difficulties are resolved (ἐὰν γὰρ λύηται τε τὰ δυσχερῆ) and the common opinions subsist (καταλείπεται τὰ ἔνδοξα), we shall have proved their validity sufficiently (δεδειγμένον ἂν εἴη ἱκανῶς).⁴²

The point here is to start with the “facts as they appear to us” (τὰ φαινόμενα), which can easily be included in popular or common opinions, generally designated in Greek by the term *endoxa* – that is, *ta phainomena* refers to brute facts, as they appear to the many, while *ta endoxa* looks back to the general opinion that one has in regard to these brute facts.⁴³ These common opinions – on happiness, the different kinds of moral dispositions, friendship, and all the other subjects raised in the *Nicomachean Ethics* – constitute many different responses to the same problem and are characterized by the fact that they are generally accepted or reflect the position of a small number of famous men. This is the definition of dialectical propositions that Aristotle presents in the *Topics* as “the opinions shared by all men, or by nearly all, or by those who represent enlightened opinion, and for the latter by all, by nearly all, or by the most well known and those who are viewed as authoritative.” It is these opinions, which are most likely to express a truth, that Aristotle undertakes to explore (cf. διαπορήσαντας) within the realm of ethics while borrowing the dialectical method, that is, by seeking the presuppositions on which these opinions rest and, when necessary, by driving out any internal contradictions that are contained within them. Once these difficulties have been resolved – that is, once this investigation has reached

⁴¹ Cf. *Nicomachean Ethics* I 9, 1098b27–29: “Now some of these views (τούτων) have been held by many men and men of old, others by a few famous people (ὀλίγοι καὶ ἔνδοξοι ἄνδρες); and it is not probable that either of these should be entirely mistaken, but rather that they should be right in at least some one respect or even in most respects”; *Ar. Nicomachean Ethics*, at Aristotle 2005: 139.8–10: “Some of these opinions (*bādhībī l-ashya*) are given by a number of the ancients (*al-qudamā*), others by a few famous people (*qatīl min al-mashhūrīn min al-nās*). None of them went wrong in all that he believed in the matter, but they were right either in one thing of what they said, or in most of it.”

⁴² *Nicomachean Ethics* VII 1, 1145b2–7. ⁴³ See Owen 1961.

completion – the truth of these opinions will have been established, though not by means of a demonstration (since their premises are in any case not necessary, at least in regard to the status of human action and the objects that are the concern of ethics) but by means of a dialectic that is capable of creating conviction. It is this method that is described in detail in the *Topics* and that corresponds to the third task that Aristotle assigns to dialectic:

For the study of the philosophical sciences it [sc. this treatise] is useful, because the ability to raise searching difficulties on both sides of a subject will make us detect more easily the truth and error about the several points that arise.⁴⁴

In the Arabic version of the *Nicomachean Ethics* this passage (VII 1, 1145b2–7) is not preserved intact:

Proof of all the opinions (*burhān jamī‘ al-ārā’*) regarding these passions, or at least most of them and those which are in truth widely-accepted (*wa-llatī hiya bi-l-ḥaqīqa mashhūra*). For if the difficulties are solved (*ḥullat*) and the opinions (*al-ārā’*) remain, sufficient proof will have been brought (*yakūnu qad utiya min al-burhān bi-mā fihi l-kifāya*).⁴⁵

The Arabic version only translates Aristotle’s passage beginning with the verb *deiknunai*, which was understood in its strongest sense of logical demonstration (*burhān*). The word *endoxa*, that is “common opinions,” has been correctly translated by *ārā’*. On the other hand, the manner in which the adjective *kuriōtata* has been rendered is noteworthy. Whereas the term in Greek is not technical and refers to opinions that are authoritative, that is, opinions that are current and widespread, its Arabic counterpart – in the expression *allatī hiya bi-l-ḥaqīqa mashhūra* – is clearly a technical way of referring to the modality of the premises that are used in the domain of rhetoric and dialectic.⁴⁶ As Deborah Black has shown, premises that are “well known” or “in conformity with opinion” are, in effect, those that one encounters most often in logical discussions and, more specifically, in rhetorical discussions. They represent a generic class of premises that comprehends all rhetorical and dialectical forms of assent; and as soon as they are accepted by the majority of men, they simultaneously include what is true and what is not true.

⁴⁴ *Top.* I 2, 101a34–36, trans. Pickard.

⁴⁵ *Ar. Nicomachean Ethics*, at Aristotle 2005: 371.16–373.2 (trans. Dunlop, slightly modified). Badawī at Aristotle 1979: 234.3–8 reconstructs the missing passage from Aristotle’s Greek text.

⁴⁶ See Aouad’s entry in *Paraph. Rhetoric* I.340–41, s.v. *mashhūr*, and Black 1990: 141–43, “widely-accepted and received premises (*al-mashhūrāt*; *al-maqbūlāt*).”

If we return now to Averroes' commentary, several discrepancies can be observed in relation to the Arabic version of the *Nicomachean Ethics*:

[Aristotle] said: we ought to make our investigation of this just as we did in the investigation of what preceded of these things, that is that we put forward first the doubtful claims or arguments which are composed of widely-accepted premises (*uidelicet ut premittamus sermones uel orationes dubitabiles qui componuntur ex propositionibus famosis*); then, that we bring after this the demonstrative arguments (*deinde ueniamus post hoc cum orationibus demonstratiuis*). For demonstrations indeed are more perfect and more excellent when we bring them after doubtful arguments (*post orationes dubitabiles*). And this must be done, either for all those affections that are discussed in this book, for most of them, or for those that are the most common of them. For when we bring an argument through which the doubt is resolved that is necessitated by widely-accepted premises, and through which we also preserve these premises – I mean that they [sc. the premises] are not destroyed in their totality – then we have brought in the demonstration a complete persuasion (*quando enim inductus fuerit sermo per quem dissoluitur dubitatio quam necessariam fecerunt propositiones famose et in quo conseruantur etiam ille propositiones, intendo ut non destruantur in toto, tunc erit in demonstratione adducta sufficientia completa*).⁴⁷

The lacunose character of the Arabic version of the *Nicomachean Ethics* does not allow for a close, word-for-word comparison with the commentary, but it nevertheless seems to be the case that Averroes has put considerable distance between himself and the text he is commenting on here, much more than in other passages where he is content to reproduce the Arabic version. In this case he puts forward a method that unfolds in two stages (*premittamus . . . deinde*):

1. In the first stage he speaks of providing “the doubtful arguments which are composed of widely-accepted premises” (*sermones uel orationes dubitabiles qui componuntur ex propositionibus famosis*) – an expression that clearly echoes the “opinions” mentioned by Aristotle, while it also emphasizes their syllogistic construction and their dialectical modality since they are designated here as statements (or arguments, or syllogisms) that leave room for doubt precisely because they are constructed from well-known premises.⁴⁸

⁴⁷ *Paraph. Nicomachean Ethics* on VII 1, 1142b2–7.

⁴⁸ Perhaps the mention of these “doubtful claims or arguments” comes from the Arabic translation of the *Nicomachean Ethics*, which failed to understand the Greek verb *diaporēsantas* correctly (in the original version of the *Nicomachean Ethics* this verb makes reference to the diaporematic method), and suggested the notion of *aporia*, which is generally translated into Arabic with the term *shakk*

2. In a second stage Averroes suggests that these dialectical arguments should be followed by “demonstrative arguments” (*cum orationibus demonstratiuis, demonstrationes; burhān in Ar. Nicomachean Ethics*), which will seem all the more perfect and complete (*perfectiores . . . et nobiliores*) because they come on the heels of these “doubtful arguments.” But how does one attain these forms of demonstrative argument? Averroes explains this at the end of the passage. Demonstrations properly so called are, in effect, put forward as the result of a procedure that consists in eliminating from a statement “the doubt that is necessitated by widely-accepted premises.” In other words, the point is to submit widely-accepted propositions to an examination that distinguishes between the true and the false.

This dialectical method has no parallel in the text of Aristotle’s *Topics*, but it does have an echo in Averroes’ *Paraph. Topics*:

As for the utility of [dialectic] in these theoretical sciences, it is of several kinds. One of them is that when we want to comprehend the truth about some problem that is difficult for us, we can through this art bring two contradictory syllogisms regarding this problem: one affirms it, the other refutes it. Then, when we have done this, we can easily distinguish the true part in these two contradictory arguments from the false by examining the premises of the two syllogisms through demonstrative methods until we separate their essential predicates from their accidental ones. For the premises of the dialectical syllogisms are not, for the most part, completely false or completely true . . . And this is only necessary, moreover, in the things in which are mingled what is essential with what is accidental, and this only occurs in natural science, divine science, and political science, in contrast to the mathematical sciences.⁴⁹

(doubt, uncertainty). Averroes in *Paraph. Topics* 34.10–11 (§9, on 100a26–30) defines dialectical arguments as “syllogisms produced from widely-accepted premises.”

⁴⁹ *Paraph. Topics* 32.1–7, 11–13 (§5, on 101a34–37). See Butterworth in *Paraph. Topics* 31: “[Averroes] presents Aristotle’s explanation of dialectic’s usefulness for raising difficulties with respect to both sides of a question as a feature which permits the dialectician to distinguish essential premises from accidental premises and thereby arrive at the true understanding of a problem. To defend this novel presentation, he offers two arguments to the effect that the dialectician can use demonstrative tests to distinguish essential from accidental premises. First, he cites what actually occurs in the practical arts as an example of such a procedure. Then he refers to the practical science of politics and to theoretical sciences such as theology and physics, explaining that Aristotle started with dialectical arguments in each of these sciences and moved to demonstrative arguments afterwards. Such an argument not only presents dialectic as an art in the service of philosophy or of demonstrative reasoning, it also emphasizes the possibility of acquiring demonstrative or theoretical knowledge about a practical science like politics, as well as about the theoretical sciences. Averroes introduces another argument about the usefulness of dialectic with respect to the philosophical sciences which stresses once again its role as an art in

This dialectical method concerns *all* statements that have the status of merely accepted premises. The precision with which he specifies the unique nature of the statements under consideration by means of a dialectical examination has somehow led Averroes to interpret the pronominal feminine endings as referring to “emotions” and no longer to “opinions” (cf. *et hoc necessarium est ut faciamus aut in omnibus istis passionibus de quibus loquimur in hoc libro aut in pluribus earum aut in prepollentibus*).

Thus, according to Averroes’ interpretation, the method used in ethics consists in putting forward doubtful arguments composed of widely accepted premises and submitting them to a dialectical analysis that makes it possible to determine, among these widely accepted propositions, which ones are true and which are false, the goal being to preserve only the true ones. It is for this reason that one would proceed from a dialectical framework of discourse, that is, one that is not demonstrative and that belongs to the realm of opinion, to a *scientific* framework of discourse, that is to say, to demonstration: a statement is scientific and demonstrative insofar as it has been subjected to dialectical examination and has been successfully demonstrated to be true. It is also this kind of statement that provides the basis for elaborating, in the *Paraph. Nicomachean Ethics*, what Averroes calls the “science” of ethics.

The “complete persuasion” (*sufficientia completa*) that is the end result of this method in ethics corresponds with Arabic *qanā’a*, which literally means “contentment, satisfaction.” Although he makes specific reference to the cognitive act that is mediated by the rhetorical method, the term *qanā’a* (*sufficientia*) also designates, in its *generic* sense, the intellectual satisfaction that occurs when any logical conclusion is accepted.⁵⁰ It is in this generic sense, equivalent to assent (*taṣḍīq*), that one must here understand the term *qanā’a* or *sufficientia*, because this “satisfaction” comes about as a result of accepting a logical conclusion that has been produced by a demonstration (*burhān*).

Conclusion

Despite the fact that the text of the *Paraph. Nicomachean Ethics* frequently seems to be too close to the Arabic text of the *Nicomachean Ethics*, this *talkhīṣ* can be seen as the result of a series of transformations, in both macrostructure

the service of demonstration. He contends that dialectic is also useful insofar as it enables us to discern whether a proposition which has been set down as true is indeed so according to the rules of demonstration. Yet this argument is simply his own; it has no parallel in Aristotle’s text.”

⁵⁰ See Black 1990: 77, 105.

and microstructure, in the Arabic version of Aristotle's text. These modifications are often subtle, but their underlying sense reveals a project that is quite different from the one that Aristotle pursues in the *Nicomachean Ethics*.

This close comparison of the *Paraph. Nicomachean Ethics* and the Arabic version of the *Nicomachean Ethics* makes it possible to understand:

1. the manner in which Averroes rethinks the articulation of ethics and politics, now viewed as "sciences." The role and function of ethics and politics at the core of a rigorous structure are specified further in at least three other texts – the *Paraph. Republic*, the *General Principles of Medicine*, and the *Comm. Medical Poem*.
2. Averroes' "logicizing" interpretation of ethics, which specifies the degree of exactitude that one can rightly expect to find in the domain of ethics and politics. It also shows that, in this commentary, he addresses himself strictly to persons who have learned and mastered the general principles of logic.
3. the manner in which Averroes conceives the "scientific" framework of discourse that belongs to ethics. He has defined demonstration in ethics as an argument that is composed of widely accepted premises that, by dialectical and demonstrative analysis, can be verified and henceforth deemed to be "true." He thereby suggests the way one proceeds from a dialectical framework of discourse, that is, one that is not demonstrative and that belongs to the realm of opinion, to a *scientific* framework of discourse. Thus, if Aristotle raises questions at the same time as he constructs the object of study, creating a permanent field of research, Averroes takes the opposite tack, building up a quantity of knowledge that is organized according to a cleverly elaborated philosophical architecture, in order to bestow on it the status of complete science.⁵¹

⁵¹ See Butterworth 1985: 23: "Here, as elsewhere, he [sc. Averroes] expresses the opinion that the sciences have been completed in his time (63.1–3). According to this position, dialectic is useful only so long as there is a need to investigate these basic problems. Now that they have been resolved, it is useful only as an exercise or as a tool for instruction. Based on generally accepted opinion and leading only to conclusions of the same order, dialectical arguments are inferior to demonstrative ones. After all, demonstrative arguments move from premises that are certain to equally certain and even universally valid conclusions. Even though Averroes acknowledges that dialectical arguments have more intellectual rigor and lead to something more substantial than the persuasive kinds of imitations achieved by rhetorical and poetical arguments, he neither considers dialectic suitable for pursuing scientific truths nor accords it the same rank as does Plato's Socrates (29.23–26). Thus by refusing to discuss the dialectical arguments of the *Republic*, Averroes intimates that this commentary has the status of a theoretical work which relies on demonstrative reasoning."

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